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MANAGEMENT AND METHODS

FOR

RURAL AND VILLAGE TEACHERS

THOMAS E. SANDERS

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THOMAS E. SANDERS

IN teaching, as in other things, look up, and the stars guide you; look down, and the gutter beckons.

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PREFACE

Teachers in rural and village schools have problems of their own. They often have all grades to teach, and many times have a crowded room with few facilities for teaching. Most books on School Management and on Methods of Teaching have been written from the viewpoint of the model school or the city system, and contain much that is impractical in the rural or the village school where ideal conditions do not exist. "Management and Methods" was written to help rural and village teachers. It embraces nine years' experience in these schools, corrected and modified by several years of deeper study and broader experience.

It will, we believe, be found at all times pleading for good common sense in the schoolroom, and for work and study and planning on the part of the teacher. The suggestions will be found helpful, we trust, to teachers, both old and young; and if they are, the author will be satisfied.

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MANAGEMENT

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I. WHAT CONSTITUTES A PREPARATION FOR TEACHING?

The old thought was that any one could teach school. We sometimes fear that a little of that sentiment still remains. Schools are not always allotted according to merit. In many places all applicants holding a license are considered equally meritorious. Fortunate indeed, then, is the community if they have a level-headed, discriminating county superintendent or examiner who has plenty of courage. He should discriminate. The system of written examination cannot be dispensed with, yet one can judge as well of a teacher's qualifications and ability as a teacher, from examining a list of questions he has prepared for the examination of his own pupils, as from examining a list of answers he has prepared for a series of questions.

But what constitutes a preparation for teaching?

1. A Knowledge of the Subject Taught.— This is the first qualification. We cannot expect good results from blind teaching. There is a margin between a teacher's teaching limit and his knowledge of the subject. No teacher can lead a class successfully up to his own mental horizon in a subject. It may be an excellent thing for the teacher to have a class almost as strong as he is in a subject, but it is often hard on the class. His instruction will be fragmentary. It will have a piece-meal appearance, and be given in broken doses.

The teacher should be at least four years in advance of his class. In the common school, he should have at least a high school education, and the high school teacher should have at least a college education.

This will give margin enough to teach successfully and give correct perspective. The teacher who has never thought beyond his course of study cannot give the parts of subjects their relative importance. When a boy in the district school, we omitted the whole subject of conjugation of the verb. Our teacher said it "*did not amount to anything.*" Later in the study of a foreign language I found that it did amount to much, and my teacher — an excellent man — would have found the same had his horizon been broader. The broader the mental horizon of the teacher, provided he has good common sense, the better the school he will teach.

When I place knowledge of the subject taught as the first qualification of the teacher, I mean not only the student's knowledge, but the teacher's knowledge also. The last is broader and deeper. The teacher must be familiar with the principles of the subject and the logical relations of the different parts. He should have a clear bird's-eye view, not only of the subject as a whole, but of its relation to other subjects. This knowledge gives perspective, and corrects many errors resulting from shortsightedness. It makes plain the essential things which need emphasis, and without which other things cannot be properly understood.

Many young teachers are quite successful even when they keep but a few weeks ahead of their class in some of the advance subjects. But this is due to enthusiasm rather than ripe scholarship. However far in advance of the class the teacher may be, it is absolutely essential that he review and plan each lesson carefully. If choice must be made between a young teacher who has but a student's knowledge of the subject but is active and growing intellectually, and one who has a wider and deeper scholarship but has ceased to grow, the choice would be unquestionably the one who is still growing. Fossils may be interesting and instructive enough to the geologist, but they have no place in the teacher's chair.

2. A Knowledge of Mind and the Laws of Mental Growth.— The teacher must deal, above all else, with mind. There can be no substitute, and there are definite laws of mental growth. It is essential, then, that the teacher shall have studied and become familiar with the laws of that which he is to develop. He should be acquainted with general psychology. However, the teacher is not so much concerned with the problems and strange psychic phenomena as with the laws of mind growth. Educational psychology — the psychology needed by the teacher — bears the same relation to general psychology that a longitudinal section of a plant does to a cross section. The teacher is not concerned with the present state of the mind as much as how it came into this state. It is the laws of growth which he needs to understand. The trained teacher should understand the laws of mental growth until he knows what notes to strike in order to produce proper mental harmony. This marks the difference between the teacher prepared for his work and the untrained teacher. One knows what to do, or at least recognizes a discord, while the other does not. It is the difference between skilled and unskilled labor. The most costly labor in the world is unskilled labor, and how much more so when its product must be immortal mind. The teacher carves not in stone and marble, but in mind and spirit. His product endures not for a day or a year, but for eternity.

3. A Knowledge of Educational Methods and Aims.—The history of education teaches some valuable lessons. Each age and people has had its view of life. This view has been expressed in its educational methods and aims. The end of education as judged by a people or an individual gives coloring to the whole process of education. The teacher who has the broadest and most intimate acquaintance with educational ideals of different ages and peoples, has the best criterion for his own work. He has his own ideal, the ripened fruit of all the rest, seasoned and corrected by the experience of the ages. Such an ideal is the best specific against the fads and follies which occasionally flood our educational field. A teacher thus armed can find the wheat among the chaff, and is less liable to follow fad and fashion to the detriment of the child.

4. A Knowledge of School-room Administration.—This may come from experience in the school-room, but without forethought it may be a costly experience to both teacher and pupil. Perhaps more teachers fail in this than in any other particular. They fail from two causes,— lack of knowledge of what to do and how to do it, or from trying to adopt an elaborate system without any adjustment to the conditions of the particular school. Like John Lock's Grand Model, it may be too grand to suit the conditions.

Good common sense is an essential quality of the teacher, and it will dictate the folly of *adoption* and the wisdom of *adaption*. System is necessary, but not red tape. The ability to govern and conduct a school is largely a matter of system, knowing how and what to do, and doing it promptly and orderly. This is why the experienced teacher, if he has not ceased to grow, is to be preferred to the inexperienced. Experience counts more in the administrative work of the school-room than anywhere else, and next to experience comes a careful study of the principles and conditions underlying the work and the experience of others.

II. SOME QUALITIES OF A GOOD TEACHER

A FEW years ago an institute conductor gave an alphabetical list of the qualities of a good teacher. He named twenty-five, all good ones, and expressed his regret that he could not think of a quality the spelling of which began with the letter x. He did not exhaust the list, because it would be no trouble to find two or more desirable qualities which would begin with the same letter. But there are some which stand out so pre-eminently and are so essential to the teacher after whom the boys and girls, the most priceless product of the State, will inevitably pattern their lives, that they cannot be ignored.

1. Good Character.— I should place this quality at the head of the list, and I mean by it all the two words express by either denotation or connotation. If our teachers are to guide and train for future life, the highest and noblest characters are none too good as models. The teacher frequently is and always should be the pupil's ideal. How necessary, then, that this ideal be a worthy one.

I remember well my own experience. I was between fifteen and sixteen years old. My teacher was a young man, college bred, and to me the highest type of perfect manhood. His dress was neat; he always appeared well groomed; he had the many little easy graces which accompany culture. I admired him, and both consciously and unconsciously modeled after him. The term closed, and he left the neighborhood. Two years later

I met him. I had grown, and I met him no longer as a pupil but as an equal. I shall never forget the meeting. We lunched together, and I never heard more unnecessary oaths come from a man in the same length of time in my life. Have you ever known what it is to have your faith brushed away in an instant? I was adrift on life's sea. It was a dangerous period. Loss of faith in the individual causes loss of faith in humanity, and I believe that condition will take a man as near Inferno as anything can in this life. Faith in humanity must be reached through faith in the individual, and it was some years before I reached it again, before I found others in whom I had perfect confidence. With this experience you may see why I place this quality of the teacher — character — above all others.

I am older now. In choosing a teacher for myself, I would care less for his personal character than his scholarship and skill; but for teachers for our immature boys and girls, let me insist that character, character of the purest type, character which will stand the full sunlight and the strongest lens without showing a flaw, shall be one of the first qualities of the teacher.

There is another quality so closely allied to this that I shall speak of it under the same heading, and that is *reputation.* Character is what a man is; reputation is what a man is thought to be. Men and women are often misjudged. The tongue of scandal will wag, and the minds of some persons are of such fiber that they are quick to listen to evil suggestions. The teacher's influence for good in a district may be destroyed by a bad reputation, whether deserved or undeserved. *Teachers must live such lives that they will be above suspicion,* and then both reputation and character are secure.

I am tempted here to speak a word of warning to young teachers, even at the expense of making this section long. Above all, be men and women, and even then one must forego some things. I have known young men to lose their power for good in a district by giving too much attention to a favorite pupil, or the sister of some pupil of the school, on Sunday afternoons. I have known lady teachers to lose the respect of the people and their opportunity of doing good in the neighborhood by too late hours and consequent languid moroseness in school next day. Patrons are critical, and young teachers — teachers whose reputations are not pretty well established in the district — must forego some of these pleasures, or pay the price, which is frequently costly enough. Be sociable without being frivolous; be talkative without being pert; be friendly without being familiar. Mind your own business, and remember a good listener is often more entertaining than a great talker. Keep your character unquestioned, and look to your reputation, for without these you had far better leave the school-room.

2. *Scholarly Habits.*— The teacher should be awake to all things about him. The attainments of a teacher are not so important as the habits of mind. Some of our best teachers are young men and women who are not yet mature, but they are growing, and have acquired that habit of mind which is essential to scholarship.

He is thinking, investigating, growing — full of life and enthusiasm, and the spirit is contagious with his pupils. He is accurate in detail without being tiresome, and his pupils are trained in accuracy. He is growing, and looks to the future. He is not resting upon his laurels, but looking for reputation in the future, based upon his success now. His life is in his work. He is losing his life in his work, but he shall find it again in the future lives of his pupils. Were I choosing an institution for myself or for the education of some one else, I should invariably choose an institution, a majority of whose faculty were young men. The success of David Starr Jordan, of Leland Stanford University, is due largely to his insight into the possibilities of men. He, in two institutions, has consequently drawn about him faculties composed of comparatively young men, who have made themselves and the institutions famous. Growing mind alone can teach.

3. Love and Sympathy.— No teacher is fit for the school-room unless he has a genuine love for children and young people. No sadder sight can be seen than a long-faced pessimist in the school-room. Talk about cruelty to animals, what can be more cruel than to keep children from five to seven hours a day in the chilling, blighting influence of a teacher long since dead to the beauty of nature and the buoyancy of healthy childhood, firmly convinced that children are totally depraved? Age does not mark this condition; it is often found at thirty, and is many times absent at sixty.

The teachers of our children should be full of health, hope, sunshine, and good cheer. They must enlist the good will and sympathy of the young. Pupils should look to them, not as masters to drive them and to exact penalties, but as friendly companions and leaders, with strength of character enough to hold respect,— teachers who inspire, guide, and direct the pupils to higher and nobler things,— teachers who have learned to see and to appreciate the beauties of nature and the power to lead pupils to do the same, ever looking upward, lifting upward, and pointing to higher things.

4. Sincerity.— The teacher must love his work, believe in it, and at heart have a burning desire to help young people. Gushing and lip service will not count. Boys and girls must know that the teacher has their welfare at heart. The sincere teacher is in no hurry to leave the building if there is a pupil who needs help. I can judge a teacher by the way the pupils cluster about him at playtime. The primary teacher may be known by the circle of children about her at recess, and the group who wait to go home as she does.

The sincere teacher also will be found at teachers' meetings and associations, and on time. He will take pride in his professional library and be alive to educational progress. He will take and read educational journals and magazines, and frequently be found at summer schools and in graduate study in colleges and universities. A catalogue from one college states that every member of the faculty is a graduate of the college, and each member has taught in the institution not less than ten years. They might add that not one of them has done advanced work in any institution in the same length of time, and that for some years the attendance has decreased. The cause is not hard to find. There is such a disease as *dry rot* even in educational institutions.

5. Worthy Ambition.— I pity the school where the teacher has reached his highest ambition. He may be content, but if he has no higher aspirations, he is very apt to let things drag. I read not long since of a teacher who had taught thirty years in the same district school, and

I wondered what kind of men and women were in his neighborhood. Such might have been for the best, but I doubt it. A middle-aged man applied for the superintendency of a town school, stating that for ten years he had been principal of a two-roomed building in a little country town. The secretary of the board replied that they did not care for a man who was without ambition. It is sometimes said a rolling stone gathers no moss, but the best teachers are not desirous of becoming *mossbacks*.

The teacher who is ambitious enough to improve, and who seeks to do his best in order to advance in his profession, will kindle more ambition in the lives of his pupils and make higher types of men and women.

III. THE TEACHER IN HIS RELATION TO THE COMMUNITY

THE teacher's relation to the community has much to do with his influence as a teacher. It is necessary to the success of the school that the teacher be well thought of. The teacher who can adapt himself quickest to conditions, who can see these in the broadest light and comprehend them best, is the most successful teacher. Adaptability without loss of individuality is a wonderful power. It is one of the qualities essential in the successful statesman or diplomat, as well as the successful teacher.

Teachers often desire to free themselves from all but school-room duties. This would make their tasks lighter and life easier, but unfortunately, when this is done, they curtail their power for good in the community and their usefulness in the school-room. They must mix with the people. In the rural and village schools the teacher who leads the life of the recluse, however proficient in the school-room, however scholarly he may be, however closely he applies himself to his profession, loses his opportunity for good, and nine times out of ten is treated with neglect if not with contempt by the people of the community.

Time after time the strongest students of a class in the college or the university — the thinkers of the class — go out and make failures in schools; while the slow, plodding students, those who were only mediocre in their classes, in fact sometimes the dummies of the class, go into similar positions and are almost idolized by the people, and in turn do really more for the community than the more brilliant students. We wonder at this, and think the people are unappreciative of true worth; we rail at it and speak of success as a mere matter of chance, when frequently it is only the power of adaptation of the person to the position, or because he is a good mixer with the people.

The primary duty of the teacher is to educate. It often happens that the citizens of the district need teaching as much as the children if not more; but this requires even greater skill than teaching children. "You must teach as if you taught them not." Such a community can be reached and influenced only by the teacher who can meet and mingle with them, and become one of their number. He must seem to be on an equal with every man, and yet possess enough natural dignity and ability to be none the less a leader. He must be able to adapt himself to circumstances, and discreet enough to keep out of factional fights and neighborhood broils without being accused of trying "to carry water on both shoulders."

The rocks upon which so many schools are wrecked are religion and politics. Perhaps nothing touches the prejudices quicker or cuts deeper than these two things, and many districts would require diplomats indeed to steer clear of one or the other.

A principal of a public school was wanted. The board wrote: "We want a good, all-round school man who expects to make teaching a profession. We want a married man between twenty-five and thirty-five years old, one who has had experience in keeping boarders, etc." A man thirty-one years old applied. He was an able school man, and had never thought of anything but teaching for a life work. He was a graduate of a normal school, a State university of high standing, and had had three years' experience in boarding. They replied, "We like your record. Come and see us." He wrote saying he did not care to visit them unless they were pretty sure they wanted him. They wired, "If you want the place, come." He went. He met the board and made a good impression. They asked what his church relations were, and he told them. They then said no one but a ——— could have the place, as there were three churches in the town, and they always allotted the schools among the different denominations. He didn't want it under the conditions. He arrived home with less money, but more experience, and they employed another teacher.

No teacher worthy the name will inject his sectarianism into his public school work or be a political partisan in the school-room. When voting time comes, he will vote; he will worship as he pleases, and further than this it is no man's business. The teacher, however, is not the man to argue politics at the post-office, or discuss baptism at the corner grocery.

The stronger the teacher's hold on the community, the easier his school work. A father or a mother in five minutes' opposition to the plans of a teacher, can tear down more than the teacher can build up in a week. If the teacher has the hearty support of the parents, it is an easy matter to secure the co-operation and approval of the children. Without the support of the parents, he is almost powerless, so far as lasting good is concerned, with the children.

The teacher must stand for all that is best in a community. His life should be above reproach. He must be a man among men, always ready to help, and yet never seeming to push himself to the front. He should know when to speak, and what to say, and when to keep still. A teacher is not heard for his much speaking, but for the weight and common sense of his words.

Above all, the teacher should stand for better schools. He should defend them against unjust attacks, whether prompted by ignorance or malice. He should be able to show to the average man the reason and the justification for the money spent in the school. This should be done at opportune times, and effectively. If the teacher cannot plead earnestly and effectively the cause of the school, who can?

There are a few things especially which the teacher must sometimes defend. In some neighborhoods the schools — the public schools — are looked upon as *pauper* schools, or at least schools for the *poor*. Such an insinuation is enough to make his face flush and his blood tingle.

I first heard it from a wealthy physician of New York, a man who had received his education in a college privately endowed, and for whose maintenance the contribution box was passed at regular intervals, and to which poor widows who washed for a living contributed a far larger per cent. of their earnings than many of the richly perfumed in the front pews did to the entire collections for the year. And yet this self-respecting, hypercritically-pious doctor would turn up his nose at maintaining a state university, and declared his children should never go to the public school to associate with every Tom, Dick, and Harry of the neighborhood. Perhaps no better indictment could be given against his own training. The best lesson his children may ever learn is when they measure themselves with the washerwoman's children, and it dawns on them that they, and not the latter, are found wanting. He did not seem to consider himself a partaker of charity when he received his mail at Uncle Sam's post-office, or took a trip on the river made navigable by Uncle Sam's locks and dams.

It is the duty of the state to educate, not simply the poor, but all. Her schools, like other institutions, are for all alike, and the patron of the public school is no more a pauper for that reason than he is a pauper for patronizing the public post-office, traveling along a public road, drinking from a public fountain, or standing beneath a public arc lamp.

There are some things the public can do more efficiently than any individual can do them. Every man, woman, and child is benefited by good public schools, the bachelor and the childless family as well as the family with children.

I went with an Oklahoma man not long ago to look at a farm. He was a man of means. He liked the land; he saw in it future possibilities, and all that. He later passed the school building where his children must go to school should he buy it. He told me the next day he could not think of buying a farm where such school facilities existed, and said that five dollars an acre, or an increase in price of $1,500 for the farm, would not stand in the way five minutes were there good schools. And many a farm would be increased twenty to fifty per cent. in market value if good public schools, with long terms and well-qualified teachers, were near them.

The other insinuation that should stir the teacher is that the people are not able to support the schools. This principle is almost axiomatic. *A people cannot be pauperized by local taxes applied to local purposes.* There is very little of the school tax that ever leaves the community. The teacher is nearly always of the community, and in fact is too often one of the immediate locality. The expenses of getting the wood and doing all kinds of work takes no money from the community. If the teacher does not live in the district, he boards there, and takes very little money away.

When the cry in 1898 came from Cuba to come over and help them, no one said we were too poor to do it. Compare the money spent in the Spanish-American War fighting Spain with the money we spend yearly fighting ignorance and training young people for future usefulness.

There is hardly an American but takes pride in our growing navy. When a great warship is launched, it is a thrilling event to the nation. But do you stop to think that the cost of one of these vessels, made as a destructive object whose whole purpose is to destroy life and property, would perhaps maintain your state university for years? Its cost would have paid the expenses of hundreds of boys through the whole university course. And think what it would mean to the state to locate permanently within her borders each year a few hundred well-trained university men. Are we to listen without protest to the puny cry that the state is not financially able to educate her people?

Another charge the teacher must sometimes meet is the cost of books and equipment to the parents. Fanned by petty politicians for political effect, the idea prevails in many places that teachers, school officials, and publishers are in league to rob the parents, while the truth is, many of the noisiest parents spend more for toys and knick-nacks for their children during the year than for school books. Complaining of the cost of books is more a habit than anything else. An incident of actual occurrence illustrates this fact.

A father was buying a fourth reader for his boy. The price was only forty cents. In his effort to get the book for less he bemeaned vehemently every one who had anything to do with the schools, from the publisher down, declaring they were breaking him up buying books. He bought it, and in less than ten minutes bought three ten-cent plugs of tobacco and gave the boy one, *and did not question the price.* The teacher should know the exact amount of money required to buy a complete set of books for the school course. This divided by the number of years in the course, will give figures which will silence most complaints.

The teacher, too, must know the value of an education to the individual. To the person who is educated, whose mind is trained to appreciate the beauty and harmony about him, who can understand the deeper meanings of life, education has an infinite value. To him education is life; it has no money value.

No intelligent person would think of placing a money value and *a money value alone* on an education. But the teacher must deal with men as they are, many of whom cannot reason except in dollars and cents. He must be able to present the value of an education in terms which they can understand. The music of a master would be lost on a Fiji Islander, while he would listen and be charmed by the beating of a tin pan. The teacher must show that every dollar spent on education in a community returns a hundred cents plus golden dividends, to that community, or else his argument is lost. No task is easier. The best homes, the finest farms, the most improved stock and fruits and grains, and all that marks progress and civilization, is found among the most intelligent, best-educated people. The great commercial nations of the world are those which spend most on education. Ignorant people have little to sell and no desire to buy. The best investment of any community is in the education of its citizens.

The teacher must be able to point out to the parents and the pupils the value of an education to the individual. Here, too, he must be able to speak in terms which they can understand. It is estimated that the average wages of illiterate persons in the United States is less than $300 a year. Assuming the earning period of a man's life to be from the time he is twenty until he is sixty, or forty years, what is the worth in money to his family or to the state? Evidently, $12,000. Courts in damage suits award upon earning capacity. The average wages of persons having a common-school education in the United States is estimated at $400 a year. His worth in money from the time he is twenty until he is sixty, therefore, is $16,000. The money value to the state between the illiterate man and the man with a common-school education is $4,000. What makes the difference? Eight years' schooling of six months to the year. — call it fifty months for good measure. What is it worth a month for the boy to be in school? *Eighty dollars a month, four dollars a day!* How often have you known the boy to be kept at home for months at a time to run errands or hoe in the crops, when his earning power could not be more than fifty cents a day? If there is a crime greater than highway robbery, it is robbery of children and innocents.

Drive home to parents and pupils the value of a high-school training. The average earning power of high-school graduates in the United States, taking the high school to mean that large list of secondary schools whose graduates will be accepted in the standard colleges and universities, is estimated at $600 a year. The money value of the high-school graduate from twenty to sixty is $24,000, an increase of $8,000 over those with a common-school education. What makes the difference? Four years' study of nine months each,— count it forty months,— and it is worth $200 a month to the boy, or $10 a day, to be in the high school. I have known the very brightest of earnest boys to be taken out of high school by niggardly parents to take jobs at $10 a month.

Let us carry this a little further, and the figures may interest the teachers themselves. The average earning power of the graduates of standard colleges and universities in the United States is $1,000 a year, or $40,000 for the forty years of one's active life. This is an increase of $16,000 over the high-school graduate. What makes the difference? Less than forty months' study. What is it worth to the individual in money per month, assuming that he is at least of *average* capacity? It is worth $400 per month, $20 per day; and yet how many will turn from the university forever for a forty-dollar-a-month job!

Study the value of an education,— the money value as well as the higher,— and be able to drive home facts and figures to the average business man in a business manner, and to your pupils and patrons, and more boys will remain in high school and leave it for the university course. More money will be voted for the schools, and better salaries paid.

The teacher who is alive to his opportunities will leave a lasting impress upon the community in which he teaches.

In conclusion we would give the following advice to strengthen the teacher's influence in the community: —

1. Let the teacher be a man or a woman in the best sense of the term, frank, honest, just, discreet, with convictions upon school matters, but with common sense enough to see what can be done and what cannot, and tact enough to lead without seeming to do so.

2. Above all things, let him be himself. Nothing is more detestable than the man who courts popularity. However, the teacher must cultivate the qualities which would make him agreeable to most people, and prune those qualities which would be disagreeable.

3. Cultivate breadth, liberality, and discreetness in matters of religion and politics. Be a man, with the opinions and convictions of a man, but learn to think and keep your mouth shut on partisan matters.

4. Get acquainted with the people, especially the parents. Do not wait for them to hunt you up and make your acquaintance. That might be good etiquette, but the chances are sixteen to one it would not work successfully in your community. The teacher is expected to lead in getting acquainted.

5. Be able to defend the cause of education, and to make plain its value to the community and the individual. Speak at opportune times, and to thinking men, and make your plea strong enough to carry conviction with it.

6. Listen respectfully to everybody's advice, then do as you please.

7. Study human nature, and be able, if possible, to talk with intelligence to every man about his business or his interests.

8. Attend church and Sunday-school, but don't be hypocritically pious.

9. Last, but not least, put your best efforts into your school duties. Prepare your work, plan your lessons, be alert, study. Send your pupils home each day feeling that they have *learned* something during the day, and that *it is good to be at school.* This will do much to give you the good will of the community, and make your work pleasant and successful.

IV. THE FIRST DAY

HAVE you taught? Do you know the importance of the first day of a term? Do you remember first days when you were a pupil? It is the most important day of the session.

The first thing the pupil studies upon entering school is the teacher. Each pupil is anxious to see the new teacher, and the more daring ones are anxious to see just what he will do upon a given occasion. They make the occasion, and happy indeed is the teacher who acquits himself well. He is upon the high road to success in that school.

SUGGESTIONS FOR THE FIRST DAY.

1. The teacher should be at his school two or three days before the opening, and select a good boarding place. By all means have a room to yourself. Economize, but remember there is no economy in denying yourself all the comforts of home. It is usually best, when possible, to board with a family who have no children in school. The children are apt to grow too familiar, and think you just one of the family. Then, too, other children will be jealous, and apt to imagine you make pets of the children with whom you board. Select your boarding place, and get settled down so as to feel at home before the opening of school. Meet as many of the patrons as possible, and show an interest in their children. Ask their co-operation, and invite them to visit the school. Be careful about telling too many of

your plans, or promising just what you will do in regard to this or that.

A few kind words, a frank, business-like manner, an interest in the children, or a little attention to baby brother, too small to attend school, if shown in a natural manner, will often win the good will of parents and open the hearts of the children to you. Such interest and attention, however, must be genuine on your part. Gushing or too much talk is dangerous. Be natural, be yourself, but be at your best.

2. If your predecessor has left proper records, secure them, and study them thoroughly. These will give you the names of most of the pupils, their classes, the former program, and the point where each class should begin work. If you do not have proper records, get as much of this information as possible from some of the larger pupils. You can secure this by a little effort and questioning, and without the pupils' thinking strange of the inquiries. Be careful to discourage criticism either of pupils, former teacher, patrons, or methods. A little tact on your part will prevent you from hearing these things.

3. From these records you can make all assignment of lessons, classification, etc. The former program may help you much in preparing your temporary program for the first day, or your permanent program for the term. Avoid radical changes. Accept the classification in all cases until pupils prove to you thoroughly that they are able to do advanced work. Too often pupils, fearing they will not be promoted at the end of the year, drop out of school a few weeks before the close of the term. Such pupils almost invariably insist on being promoted with their class at the beginning of the next year. Better

by far hold them a few weeks until they prove by class work and examination that they are competent for the advanced class. Pupils and parents should realize that a change of teachers does not mean an erasure of all records.

4. See that the school-room and the school grounds are in good condition before the day for school to begin. This may not be exactly the teacher's duty, but it is apt to be neglected unless the teacher does it. There is a good time coming when teachers will not be expected to look after such things. Their work will be professional. In the more progressive districts the floors are scrubbed, the desks and windows cleaned, and the buildings and grounds placed in good condition by the school officials. This is right and proper, but if such duties fall upon the teacher, let him see to it that they are done, and done well, before the opening of school. The task will be no greater, and some one must do it. Such things must be done. It requires courage to teach school — courage enough to meet the indolent boy, angry parent, or ignorant hobo without flinching, and tact enough to avoid a conflict. It requires grit enough also to tackle a fallen stove-pipe or a knotty stick of wood, if it becomes necessary. The school-room is no place for timid people who cannot meet emergencies, and those who cannot or will not do such little things when circumstances demand should steer clear of teaching.

5. The teacher should spend much time in and about the building. The feeling of newness must be worn off. He should plan the seating and movement of classes, the entering and dismissing of pupils, and numerous other things, before the school opens. It is far better to consider these things carefully and decide them properly at

the beginning of the term than to be obliged to make changes later. Have your plans well laid, and follow them from the first.

6. Have everything planned for the first day and at your tongue's end. Have definite plans for each lesson in the different subjects. Study your predecessor's report carefully. Know just what each lesson is to be, and be able to point out the page and the paragraph with least possible loss of time.

7. Have a preliminary program for the first day's work. Modify it later as occasion demands.

8. Do not bore the pupils by a long list of "thou shalt nots." Great talkers are seldom great doers. The first day of school is a day to do rather than to talk. The philosophy of good school management is to give positive rather than negative commands. Give pupils something to do rather than forbid doing. "Do right" is the only rule of government necessary, and pupils understand it without explanation or command.

9. Be first on the ground. This is a good rule for every day. Be busy, be pleasant, be quiet, talk little, do much, be orderly in all things.

10. Do not waste time the first morning getting the names and ages of pupils. Teachers often waste half an hour at this useless exercise. Nothing is a greater loss of time, unless it be the old-fashioned morning and evening roll-call. With one hundred and thirty-five pupils under my charge in the same room, if a single boy or girl was not in place at opening exercise, I knew who was absent. Get pupils at work the first morning in the shortest possible time. "Satan finds some mischief still for idle hands to do"— and idle minds also. Plan

to have every pupil at work within fifteen minutes after the bell rings. Carry out your plans.

11. Have definite standards of conduct. Know what you expect to permit and what you do not. Permit no conduct the first day unless you expect to permit it all the time. An ounce of prevention is worth a pound of cure. Many teachers make the fatal mistake of allowing almost any kind of conduct the first few days, thinking they will get the good will of pupils and that the pupils will settle down later. Nothing is a greater mistake. We respect those most who rule us best, if their rule is just and their methods good. No greater compliment to the teacher can be carried home by the pupils in the evening of the first day of school, and nothing which portends a more successful term, than the verdict, " He knows what he is doing, and means just what he says."

What will be the verdict of your pupils?

V. THE PROGRAM

Teachers cannot attach too much importance to the daily program of study and recitation. It should be made a subject of careful thought. Too often the teacher writes out a program at random, and in the same slipshod manner uses it for a whole term of school. In fact, some teachers do not give the least thought to the program until the morning they open their school term. Such negligence is inexcusable. There are many things to be considered in making a school program, among which are the following: —

1. Children should be classified so the teacher will not have too many recitations. No teacher should have more than twenty recitations a day at most, and a less number if possible. This can be done, and yet the school be well graded by a judicious combination of subjects and classes. A strong third grade may do the work of a weak fourth grade in many subjects. Two or more grades may be frequently combined in spelling, geography, or history.

2. The program must designate the time and order of study as well as of recitation. It is just as essential that a pupil be systematic in study as in recitation. When the time comes to study geography, let all other books be laid aside, and let the pupils of the class all study geography. Let the geographies be used, and let all other books and papers be placed in the desk, and the whole attention of the class be concentrated upon geography. The teachers who insist upon this will find it a great aid to discipline.

3. Each pupil should recite at least once between intermissions. In nine tenths of our schools there is, besides the noon intermission, a short recess about the middle of the forenoon, and another about the middle of the afternoon, thus dividing the day into four periods. No class should be without a recitation in each of these periods. Young pupils get restless, and the change to the recitation rests them. Many teachers here make a mistake by having the primary pupils recite the first thing after recess. They are fresh, and can be kept busy more easily then than later. A better plan would be to have them recite later, after they have grown tired. The recitation then rests them. Make it a rule to have your largest, most restless class recite at those periods when they would be least apt to study quietly.

4. The proper arrangement of a program requires a due regard for the sequence of subjects. Have the harder subject in those periods of the day when the minds of the pupils are in the best condition to study. Do not place two or three of the more difficult subjects in immediate succession. There is another thing almost universal in the arrangement of a program, and yet it is not always the best. It is that in nearly all schools pupils prepare the lesson immediately before the recitation of that lesson. They prepare arithmetic the hour just before they recite arithmetic, and so on. In many subjects the best time to prepare the advance lesson is immediately after the recitation of the lesson in that subject. New points have been explained in class, and new ideas received, which only need application to become firmly fixed in the pupil's mind. The pupils leave a good recitation filled with enthusiasm. This is the time to strike while the iron is hot. Many leave the

recitation in algebra filled with thoughts of the binomial theorem, or anxious to try a new statement of a problem, and reluctantly lay it aside while they turn to the dry roots of the Latin verb. When they come again to algebra, they do not have half the enthusiasm they had when the subject was laid aside, and do not accomplish as much in the same time. Let the teachers of advance grades especially consider this point in arranging their programs.

5. The program should be planned with due regard to the importance of the different subjects taught. All subjects of the course are not of equal value. I knew a school not long ago where the eighth year devoted as much time to oral spelling as to any other subject. The study period was as long and the recitation period as long. If the class had been remarkably proficient in spelling, it would have been different, but I could not see that they were any better after having devoted all this time of the school course to spelling, than the average class. Having so much time in which to prepare their spelling lesson, they were led to sluggish mental habits. It is not the number of times a lesson is studied over, but the mental tension during the time of study, that counts.

6. The length of the recitation period should be governed by the subject and the number in the class. Some subjects require more time than others, to accomplish anything in the recitation. The recitation period for primary pupils should be short, not more than fifteen minutes. Make the recitation interesting, to the point, and secure the attention of each pupil, otherwise it is a failure in some degree.

VI. GRADING A RURAL SCHOOL

In all the more progressive States the rural and village schools are well graded. This is the next step in the educational progress of the remaining States. The time is ripe for organization. We need courses of study wisely planned, teachers who are competent to classify and grade schools and to follow and use courses of study intelligently. It will be a great saving of energy and bring wonderful results. A law giving State and county superintendents the power to act, and making the compensation sufficient to get competent men, is needed. A county superintendent of good judgment and discretion — one with a backbone also — will accomplish wonders in his county. "Peace hath her victories, no less than war," and a devout man with courage and ability can ofttimes render a service as great in building up the schools of his county as could be rendered on the field of battle. These victories of peace will give new life to coming generations.

Why Grade Schools?

1. It economizes the teacher's time. He can teach a class as well as an individual.

2. It stimulates pupils to better work.

3. It secures better and more regular attendance.

4. It keeps pupils in school longer.

5. It gives patrons a better standard to judge a child's progress. If there is ever an opportunity for the teacher to play the part of a charlatan and to ride a hobby, it

is in an ungraded school, and this, too, to the everlasting detriment of the child.

How to Grade a School.— There are few greater tasks for the young teacher than to properly grade a school. Nowhere else does experience in teaching count for so much. A working knowledge of the graded system is very valuable. The greatest obstacle to grading the country schools, however, is the teachers who have taught in them for a number of years, and are so deep in the educational ruts and traditions of the old-time school that they have no faith in organization or gradation or anything different from what they are used to doing. When a boy, I heard old teachers croak themselves hoarse declaring the country schools could not be graded, but almost every school in that State has been so closely graded now for more than a decade that a pupil leaving one school fits in the same grade in any other public school. Next to these old teachers are the young men and women — worthy, ambitious, good material — who know nothing of a well-graded school. Their horizon is limited. They mean well, but they have not studied the problems of school organization. They are amateurs in the work, and will learn by experience.

There are two kinds of gradation — close gradation and loose gradation. The first is, under most circumstances, the better, but the latter is a step in the right direction, and is often the best initial step in grading an ungraded school. In close gradation pupils move along in all the branches of the school course; in loose gradation they may not be uniform in the different subjects of the course. They may be in the sixth grade in arithmetic and in the fifth in grammar. The danger in loose gradation is that pupils will devote too much time to the particular subject they like best. It gives teachers a chance to ride their hobby.

Some years ago, while the author was superintendent of schools, a boy entered school who had been twice through his history of the United States and once through the complete geography, but had never studied grammar, and had only been to "United States Money" in Ray's arithmetic — the only book he had studied on the subject.

Principles of Gradation.— 1. Pupils should be placed in grades adapted to their advancement and ability. It matters little what the grade is called, so long as the work is suited to the capacity of the pupil. Do not class the pupil so high that he cannot do the work. More pupils are injured by too high than too low classification. It leads to a smattering knowledge of the subject, and to habits of mental dissipation. Too low classification may lead to a lack of effort on the part of pupils. Nothing is a greater stimulus to study than a good class of equal ability to do the work.

2. The different subjects in the school course should be kept abreast, each subject receiving its share of attention. This is the bane of the ungraded school. Pupils go off at a tangent on the teacher's hobby. This is where a uniform course of study is beneficial. The personal likes or dislikes of the individual teacher are nearly eliminated in a course of study planned carefully by several persons familiar with the conditions of the schools. The course of study will be treated more fully in a subsequent chapter.

I have had pupils often enter my school who were reading in the fourth reader, but were unable to make the combinations of numbers to ten. From one school I received a number of such pupils, and some of the parents could not see why their children were not classed as high in the public schools as they had been in the private school. They could not see that the teacher had catered to the whims of the ignorant, and graded the pupils upon the basis of the parents' estimate of the child, instead of the amount of work the child could do. I even heard a teacher (?) once advocate that if a parent wanted a child in a certain grade, it was the teacher's duty to place it there. The same argument would justify the parent in demanding that his child be graduated at the end of the year, regardless of ability.

3. Age, health, capacity, and scholarship should be considered in grading. Older pupils may often be classed higher than younger ones, although the examination grades are the same. Some pupils have much reserve power, while others are working up to their limit. The first will be stimulated to greater efforts, while the others will be discouraged or overtaxed. The gravest charge the graded school has to meet is the overwork of the pupils in poor health. Do not grade too high a child who is physically weak.

4. In the elementary school, reading and arithmetic should form the basis of gradation. All pupils are in these subjects. Without proficiency in these subjects, progress in other subjects is marred. The judicious teacher weighs well the pupil's progress in other branches, but insists upon thorough work in these two for promotion.

5. Do not have too many classes. Grade and classify your pupils so you will never have more than twenty

recitations a day, and you should have less. This can be done by judiciously combining classes in certain subjects.

6. Do not make your classes too large. From five to ten make the best sized classes. If the class is less than five, it is hard to secure class interest; if it is too large, there is little or no chance for individual instruction.

7. The amount of work required must in some degree consider the taste of the pupils. Some will excel in arithmetic. From such pupils require the maximum amount of arithmetic work. Others will excel in language and be poor in arithmetic. From them require the maximum of language and the minimum of arithmetic.

8. Follow at first the classification of your predecessor. Let pupils understand that they must show themselves proficient and above their class before they can be classed higher than they were assigned by their last teacher. Change in the administration of a well-graded school should not mean a change in classification of pupils. However, almost every teacher will be greeted when he enters a school for the first time, by a howl about the former teacher not promoting John and Jim and the others because she did not like them. My advice is to let John and Jim and the others prove their worth to you by their works. If you do, in nine cases out of ten you will keep the classification of the former teacher.

9. Do not make your grading so iron-clad that the pupil may not sometimes be promoted irregularly. Such occasions will not occur often in a well-graded school, and such promotions must be made with care. Some

pupils show off well for a few weeks, but the race is won only at the end.

10. Remember that promotion pleases parents and pupils, while the reverse does not. Seek, then, to promote only when the pupil is ready for the work of the next grade. If a pupil can do more than his class, but is not able to do the work of the next grade, assign extra work rather than promote the pupil, and then have him fail to make his grade at the end of the year, and fail of promotion to the next class.

VII. THE COURSE OF STUDY

THE very argument used by many that the rural and village schools cannot follow a course of study and be well graded, is the strongest argument for the grading of these schools. A graded course of study will —

1. Secure better attendance.

2. Secure more regular attendance.

3. Keep pupils in school longer. Hundreds of children are kept in school and do excellent work who would not be in school if it were not for the pleasure of feeling that they would complete a course of study. In other words, they want to graduate. Hundreds of young men have spent two and three profitable years in school, much to their good, led by a desire to get a diploma.

4. Cause better work on the part of teachers as well as pupils. The tread-mill grind of going over and over the same ground each year, disgusts many pupils with school. I speak from experience. One school of my knowledge, under a teacher who did not believe in the possibilities of grading the country school, took a class of children five successive years from the first page of Ray's Third Part Arithmetic to percentage. The terms were short, and it took just about that long to get over that many problems. The teacher whose mental horizon is so narrow that he sees no possible way to grade the school, usually belongs to the class of teachers who always assign the next five pages, regardless of what is treated in them.

The whole argument against the possibility of grading the rural schools has but one point, and that is, the children do not attend regularly. The person who has ever studied or observed the influence of grading on school attendance, knows that grading is one of the greatest promoters of regular attendance. If there is anything which really stirs parents and makes them alive to school matters, it is the fact that their child did not make his grade. The fear that the child will fail to pass overcomes many a flimsy excuse which otherwise would keep the child out of school near the close of the year. When pupils know that if they miss the last of the term they must stand an examination on the work before they enter the next grade the next year, all will prefer to pass at the close rather than to risk it after a summer's rest. While teachers must put forth extra effort near the close of the year to keep up school interest, as every one who is fit to teach will do, the graded school will help much.

The graded rural school is coming because it is the common-sense thing, and it is one of the best schools in the world under a good teacher. It does not have the hide-bound grading of the city, and yet it is definite and complete, and has all the stimulus of class interest. It is practical in any school system. The grading of a school requires a course of study, and the planning of a course of study is a task. Here is where the knowledge of the specialist and the good judgment of the liberally educated man is needed. All the conditions must be weighed, and due consideration given to the worth of studies. The scientist wants to magnify science, the historian history, the mathematician mathematics, and the student of language is apt to place too much stress upon language. Herein lies the danger of the specialist in the high schools, unless all is equalized and adjusted by a liberal-minded superintendent of sound judgment. A glance at a course of study will reveal much of the mental calibre of the teachers in the school. We find high schools proper with the university curricula,—high sounding names, long courses of study, degrees galore.

Below is given a suggestive outline of a course of study. It may be modified to suit local conditions.

It would not be expected that each class have a daily recitation in each subject named below. In the first year, for example, reading, writing, spelling, and language would all be combined; then different classes might be combined in many subjects.

1^1 Suggestive Course of Study.
  1^2 Primary Grades.
    1^3 First Year.
      1^4 Reading.
      2^4 Writing.
      3^4 Spelling.
      4^4 Language.
      5^4 Numbers.
      6^4 General Lessons.
        1^5 Singing.
        2^5 Drawing.
        3^5 Care of the Body.
        4^5 Calisthenics.
        5^5 Morals and Manners.
    2^3 Second Year.
      1^4 Reading.
      2^4 Writing.
      3^4 Spelling.
      4^4 Language.

5^4 Numbers.
6^4 General Lessons.
1^5 Singing.
2^5 Drawing.
3^5 Care of the Body.
4^5 Calisthenics.
5^5 Morals and Manners.
3^3 Third Year.
1^4 Reading.
2^4 Writing.
3^4 Spelling.
4^4 Language.
5^4 Primary Arithmetic.
6^4 General Lessons.
1^5 Singing.
2^5 Drawing.
3^5 Care of the Body.
4^5 Nature Study.
5^5 Calisthenics.
6^5 Morals and Manners.
2^2 Intermediate Grades.
1^3 Fourth Year.
1^4 Reading.
2^4 Writing.
3^4 Spelling.
4^4 Language.
5^4 Arithmetic.
6^4 Geography.
7^4 General Lessons.
1^5 Singing.
2^5 Drawing.
3^5 Health Lessons.

        - 4^5 Nature Study.
        - 5^5 Calisthenics.
        - 6^5 Morals and Manners.

- 2^3 Fifth Year.
    - 1^4 Reading and Literature.
    - 2^4 Writing.
    - 3^4 Spelling.
    - 4^4 Language.
    - 5^4 Arithmetic.
    - 6^4 Geography.
    - 7^4 General Lessons.
        - 1^5 Music.
        - 2^5 Drawing.
        - 3^5 Hygiene.
        - 4^5 Nature or Agriculture.
        - 5^5 Calisthenics.
        - 6^5 Morals and Manners.
- 3^3 Sixth Year.
    - 1^4 Literature.
    - 2^4 Writing.
    - 3^4 Spelling.
    - 4^4 Elementary Grammar.
    - 5^4 Arithmetic.
    - 6^4 Geography.
    - 7^4 History.
    - 8^4 General Lessons.
        - 1^5 Music.
        - 2^5 Drawing.
        - 3^5 Hygiene.
        - 4^5 Nature or Agriculture.
        - 5^5 Calisthenics.
        - 6^5 Morals and Manners.

- 3^2 Advanced Grades.
  - 1^3 Seventh Year.
    - 1^4 Literature.
    - 2^4 Orthography.
    - 3^4 Grammar.
    - 4^4 Arithmetic.
    - 5^4 Geography.
    - 6^4 History.
    - 7^4 Physiology.
    - 8^4 General Exercises.
      - 1^5 Music.
      - 2^5 Drawing.
      - 3^5 Nature or Agriculture.
      - 4^5 Calisthenics.
      - 5^5 Morals and Manners.
  - 2^3 Eighth Year.
    - 1^4 Literature.
    - 2^4 Orthography.
    - 3^4 Grammar and Composition.
    - 4^4 Arithmetic.
    - 5^4 Geography.
    - 6^4 History.
    - 7^4 Physiology.
    - 8^4 General Exercises.
      - 1^5 Music.
      - 2^5 Drawing.
      - 3^5 Nature or Agriculture.
      - 4^5 Calisthenics.
      - 5^5 Literary Exercises.
      - 6^5 Morals and Manners.

If your county or State does not have a prescribed course of study, you can from this outline work out a well-planned course. Make careful estimates of what your classes can do, and plan to distribute this work over the different months of the term, allowing a few weeks for review at the close of the year, as well as at the beginning of the term.

VIII. THE ASSIGNMENT OF THE LESSON

No recitation is complete until the advanced lesson is assigned. This is one of the most important things in a good school, and yet many teachers do not give it a second thought. It is shamefully true that many times neither the teacher nor the class remember the exact extent of the lesson.

The proper assignment of a lesson requires forethought on the part of the teacher. To assign too much leads pupils to a smattering knowledge of the subject. They soon learn that it is impossible to get over all the lesson, hence they need study only part of the assignment. Pupils are frequently found who do not pretend to get the whole lesson. The teacher is never known to get to the end of the lesson, and there is no incentive to prepare all of it.

If the lesson is too short, some pupils soon get it, and stop study — and often stop others from studying; while a number, feeling that they can soon prepare a little short lesson like that, put it off until the very last minute, and then perhaps do not have half time enough to prepare it as they should. In assigning a lesson, the following points should be considered: —

1. The lesson should be specific. There should be no doubt in the mind of the teacher or any member of the class about how much is to be done or how it is to be prepared. Teach pupils to listen to the assignment, and then be brief and definite yourself.

2. The ability of the class must be considered in the assignment of the lesson. Assign the work which can be done, and properly done, by the average members of the class. Assign supplementary topics, and work for those brighter ones who always get done first, and then get into mischief next. Help the slow ones and encourage them, but do not do their work for them nor permit it to go undone.

3. The time for the preparation must be considered in assigning the lesson. Some teachers assign as much when the pupils have a quarter of an hour to study it as if they had a quarter of a day. The time of the day should be considered also. If it must be prepared while the pupils are tired or when they are fresh and rested, it will modify the assignment.

4. The previous training of the pupils will have much to do with the assignment of the lesson. After school is in session a few months, and pupils are used to systematic study, the lessons may be longer than at the beginning of the term.

5. The teacher should know the relation the new lesson is to bear to the previous lessons and to those which are to follow. This perspective is essential to the intelligent assignment of the new lesson, otherwise it is blind assignment only.

6. The teacher should know the contents of the new lesson, and the length of time which it should take the class to prepare it. A high school teacher of my acquaintance frequently assigned lessons in algebra which would have required her on an average of three hours to prepare. It is a very common occurrence for a teacher to assign a lesson which he could not recite intelligently himself without a longer time for study than the class

have to prepare. The teacher then grumbles and frets and scolds because the pupils do not get their lessons.

7. Assign a reasonable lesson, then require that it be properly prepared and recited. This is the best specific for a good school, and for happy, hearty work from the pupils.

IX. THE RECITATION

The recitation is the best test of the teacher. A man may be a good organizer of schools, and yet a very poor teacher; a good teacher is frequently a poor organizer; but a good teacher, whatever else he may lack, is master of the recitation. It is in the recitation that mind comes in contact with mind, and this is the greatest stimulant of thought. Were it not for the recitation, private study and teaching by correspondence might take the place of regular school work. If assigning lessons were the only purpose of the teacher, a simple electrical device might be arranged to indicate the pages and paragraphs and the time to be allotted to study, and the teacher could be dispensed with. An aimless, listless, worthless recitation is the most disorganizing agency in a school.

Some purposes of the recitation are: —

1. To test the pupils' knowledge and the teacher's thoroughness in instruction.

2. To explain and guide the pupil's efforts.

3. To awaken inquiry and stimulate study and investigation.

4. To review previous work, deepen impressions, and aid pupils in the assimilation of knowledge previously learned.

Each recitation will furnish opportunity for achieving these ends. Sometimes one purpose will predominate in the recitation and sometimes another. Very often we make the first the only object, and then limit it to a test of the pupil's preparation. Perhaps in this day, when the tendency is so strongly toward *much talk and little thought* in the recitation, this conservative tendency is not to be wholly condemned, but the teacher who does not consider the recitation in part a test of the efficiency of his own instruction, is in danger of becoming a "Gradgrind" without a conscience.

The second is a legitimate purpose, but may be easily overdone. The purpose of the school is to give the child the experience of the race without serious loss of time. A legitimate purpose of the recitation, in like manner, is to direct the efforts of the pupil, so he may have a maximum of mental achievement in a minimum of time. When the pupil is groping, when he is wasting energy in misguided effort, help from the teacher is sound pedagogy. Yet in the present day there is a strong tendency toward doing the thinking for the pupil, and the teacher should give aid judiciously. Nothing will give strength and mental fiber but hard and continued thinking on the part of the pupil, and nothing breeds mental effeminacy as fast as the teacher's doing the thinking for the pupil. The teacher may make clear the steps and guide the efforts, but he must not do the work.

To awaken thought and stimulate investigation is the leading purpose of the recitation. Here the teacher's individuality and personality assert themselves. The flash of the eye, the tone of the voice, the activity of the mind, his knowledge of human nature — boy and girl nature — here assert themselves. Perfect self-possession and personal magnetism serve to stimulate and encourage. The art of questioning is an item of importance. The dull teacher blunts and represses the mental activity of the child. The influences of some teachers on a class is like an anesthetic, and if continued long enough, may produce a mental lethargy almost as harmful. Life, animation, a desire to know, quickens and organizes knowledge. Definite aim and self-control in the teacher make the recitation a source of inspiration to the pupil, and render unnecessary the constant upbraiding so often heard directed to lazy pupils during study periods.

Knowledge is worthless until it becomes a part of the individual. Undigested food blocks, congests, and impairs digestion. Knowledge unassimilated destroys mental power. It is a law of the mind that it acts most easily as it has acted before. Thought, whatever may be its mysterious connection with the brain, leaves an impress and tends to follow the path of least resistance. Thinking along certain lines forms mental habits. It is one purpose of the recitation to strengthen these lines. Impressions ever so clear will fade from the child's mind unless repeated. Hence the necessity for constant review, and the recitation should renew and strengthen these impressions, and completely correlate the new knowledge with the old.

These being the main purposes of the recitation, how may they be attained? Much will depend upon the personality of the teacher. There are also many minor details. The criterion for testing these details is this: *The minds of the individuals of the class and the mind of the teacher must be a unit.* Anything which breaks this unity is detrimental to the recitation: anything which promotes this unity is beneficial to the recitation. This principle will settle many minor details. Young teachers are prone to try device after device, thinking little of the principle upon which they are based.

What is the purpose of a separate recitation seat? To bring the class closer together where the pupils will be convenient to the blackboard, the map, or the chart, and in close touch with the teacher, and by this means aid the mental unity of the pupils and the teacher. Everything liable to divide the attention of the class should if possible be removed. Seriousness, earnestness, businesslike methods on the part of the teacher will get the same on the part of the pupils. Let every word of the teacher be to the point, and do not let him forget that *it is the pupil's place to recite, and not the teacher's.*

Shall the teacher stop the recitation to chastise a pupil for misconduct? It is sometimes necessary, but rarely so. Is the pupil's conduct such that it is more detrimental to the mental unity of the class than the stopping of the recitation? If not, unless the bad conduct of the pupil is growing habitual, better ignore it at the time and continue the recitation. Reprove the pupil in private, or after the recitation. If you must stop the recitation to reprove, administer the reproof caustic enough so that it will not have to be repeated. Let the teacher inject business methods and seriousness into the recitation, and pupils will catch the spirit, and this spirit will be carried into the study periods.

The teacher must have a definite plan of the lesson in mind; he must have his knowledge organized; he must know what is in the lesson for the day; he must know it as an individual lesson, and know it in its relation to that which precedes and that which follows it. He must have an outline of the lesson in his own mind, and the thought of the text, without having to refer to each step in the text-book. If he is teaching percentage, he should be familiar enough with the author's treatment to name the cases and to give the different applications of percentage in the order in which the author treats them. He should also be familiar with the author's language in the wording of the definitions, principles, and rules. The teacher's minimum knowledge of the subject and its treatment should be the maximum of the pupil's knowledge after studying it. How can a confused, heterogeneous mass of unorganized, unassimilated, shadowy facts — a lot of hazy, ghost-like generalities — in the mind of the teacher, lead to specific, definite knowledge on the part of the pupil? As well attempt to make bricks out of moonshine! Too often the recitation is a time-killer, the teacher having no object but to kill time until the next recess. He puts no soul into his work, and the pupil gets no life out of it.

" He that loseth his own life shall find it " in the future lives of his pupils.

X. EXAMINATIONS

Examinations are the weak teacher's hobby, the pupil's dread, and the critic's bug-bear, and yet they are necessary to a systematic school course. They are often overdone, and it cannot be denied that they are often detrimental to nervous, ambitious pupils. The detriment, however, comes from their abuse rather than their use. Too often examinations are charged with things for which they are not responsible. The pale, delicate girl, urged into society by a mother too fearful lest her daughter grow old on her hands, quits school to be rid of the worry and nerve strain of examination, *and yet she can dance from dark until daylight.* It is not infrequent we teachers hear charges against the school which we know to be utterly false. It would be a most excellent thing if all girls who left school on account of their health were compelled to refrain from all social dissipation for a twelve month, and better still if we could prevent all social dissipation during the school year.

It is noticeable, also, that those teachers who show least proficiency in passing examinations are often the most unreasonable and the most exacting in the examination of their pupils. High school teachers give examinations in Latin and mathematics hard enough that if the same questions had been used in the examination of the teachers who prepared them six weeks before they were used to test the pupil, the charity of the examiner alone would have saved the teacher from failure.

From an examination, a reasonable one, properly managed, good results may come. Examinations are bad masters, but good servants. They have been abused, and this has created prejudice and opposition. They serve some good and even necessary purposes:—

1. They stimulate pupils to thorough study and a determination to master the subject. The pupil that has mastered the subject is always ready for examination, and usually welcomes it. The shallow pupil dreads it. The fact that they expect to be examined on a subject is an incentive to thorough work, and it is a proper incentive also.

2. Examinations teach pupils to apply and to express their knowledge. The man who has his knowledge at hand, who can think quickly and accurately, who can focus his thoughts upon a single point, is the successful man. Examinations properly conducted train pupils in quick, accurate, systematic thinking.

3. Examinations give valuable and necessary data for promotions, records, and reports. To base promotion wholly upon examinations is an educational blunder; to wholly neglect them in making promotions is a greater blunder. A combination of class grades and examination grades is a far safer guide. Every teacher has seen pupils who are brilliant in recitation, but who do not seem to retain anything a week, and who never seem to get a connected view or working knowledge of any subject. On the other hand, to make the examination the only test is unfair. The pupil may be in poor physical condition at the time of examination; he may be easily confused or he may be naturally a slow worker; in either case the examination grades would not do him justice.

The character of the examination questions is important. We can as well judge of a teacher's qualifications to teach by carefully considering a list of questions he prepares for the examination of his class, as to grade him upon a list he has answered. His teaching ability and ideals will be unconsciously revealed in his questions. The school examination will test the teacher's teaching as well as the pupil's learning. A primary teacher who had given her class a number of oral lessons on the camel, showing them pictures of the camel, pictures of the caravans, etc., and had told them that the camel was called the "ship of the desert," because it could drink enough water to last it many days, that the large hump on its back was fat, and when the camel was without food this fat went to *nourish* the body, was surprised on examination, when a boy said the camel was called the ship of the desert because it had a big hump of fat on its back, and whenever it was hungry, *it just reached around and got a bite.* The examination quickly revealed the trouble. He did not understand the word *nourish.*

The examination should not be killing to the body or to the mind, and should never be what occasionally some teachers make it, simply an implement of torture for pupils. It should not be of such a nature as to stimulate cramming, and should not be a discouragement to study.

1. It should be confined to what the pupil ought to know or be able to do. It is no place for puzzles, or for questions designed to show the teacher's intricate knowledge of the subject.

2. It should be a test of the pupil's ability and acquirements, and not of his power to memorize. The

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examination should test the pupil's *understanding* of the subject, and this test will help the teacher, serving as a guide in his future work with the pupil.

3. It should be thorough, but not tedious. The questions should be pointed and clear, requiring brief, plain answers. They should avoid minor details and unimportant technicalities, and call for explanations, principles, essential definitions, and leading features.

4. It should be made to foster genuine study rather than cramming with facts. When pupils find that the examination tests the thoroughness of the work and the mastery of the subject, rather than the acquisition of a mass of memorized facts, they will study to understand rather than simply to remember.

5. It should not be too long. Teachers are sometimes guilty of cruelty to children simply by the length of the examinations they give. Each of us, man or child, has but a limited amount of energy at any given time. When this is exhausted, further efforts are futile. I have known teachers to give examinations upon a single subject which would keep a large majority of the class a whole half day and until after dark. If it were occasionally an individual pupil, one would suppose the pupil was slow, but when it is a large per cent. of the class, it shows that the teacher has misjudged the pupils or has a wrong conception of the examination. Such things ought to call down the righteous indignation of an intelligent public, and it is doubtful if a teacher whose judgment is at fault so much in that line, is the best teacher. Lengthy examinations wear out the pupil, and if the teacher grades the papers properly, they wear out the teacher also.

Teachers as a rule do not give thought enough to the preparation of the examination questions. They are made out hurriedly. The teacher usually prepares the questions in order to fit certain things which have been emphasized in class or *more plainly to test the pupils' memory.* A better plan would be to have some level-headed teacher who has not had charge of the class to prepare the questions to test the pupils' knowledge of the subject. The examination then will serve a double purpose — it will more accurately test the pupil, and it will also test the teacher's teaching.

Examinations should not be held too often. The formal examination each month is too frequent. Written reviews and written recitations, however, should be frequent, and should come unannounced. The pupils should be trained to be ready at any time, and this training will do much to relieve the nervous strain upon regular examination days. Never threaten pupils with examination, discourage cramming, seek to get your pupils free and self-possessed upon examination days; as far as possible prevent late study in preparation for examination; plan your questions with care, make them to test the understanding of pupils, make them fair and of reasonable length, and your pupils will not fear examination days, and you will find examinations useful in many ways, and hurtful in none.

XI. REPORTS

When the teacher has decided upon the time and plan of the examination, when he has prepared the questions and the pupils have answered them, his task is but half done. The subject of grading is an important one, and to the mind of the conscientious teacher, who has the pupil's welfare at heart,— and the teachers are few and far between who have not,— there are other perplexing questions. The cold, matter-of-fact teacher, the teacher without sympathy, the heartless "Gradgrind" who measures each answer with his own mental yard-stick — and this yard-stick sometimes of questionable accuracy — may drive many sensitive pupils from school and rack the nerves of many others. These have brought examinations into disrepute.

On the other hand, the teacher of vacillating tendency, the one without personality, who is continually bidding for popularity, who is satisfied with anything, any way, any time, may take all the seriousness out of the examination, and make it the laughing-stock of the pupils. I have seen teachers' reports in which it was seldom that any of the pupils made less than 95 per cent. Such grades may be made; some pupils will frequently make them. A friend of mine has a general average of 102 per cent. on a teacher's license. Such grades are rare, however. In this case the county superintendent allowed 5 per cent. general average for attendance at county institute, and his average scholarship was 97 per cent.

A pupil's grades mean little or nothing when considered by themselves. Teachers' standards of grading are various. Heat and cold are only relative terms, and the grades of a pupil, likewise, will only indicate his standing or progress compared with others of the class. The teacher's standard may be high or low; he may grade loosely or rigidly, but he must grade all members of the class on the same basis. It is like the assessment of property. If a town wants to raise $1,000, it makes little difference whether property is assessed high or low. The rate will be correspondingly low or high, but all property must be listed on the same basis.

Grading is necessary and serves three well-defined purposes:—

1. It stimulates effort on the part of pupils. The conscientious teacher is pleased with the success and grieved at the failure of pupils. He expresses this pleasure by words, looks, and grades, and the recorded approval of the teacher is a strong incentive to effort.

2. Grades indicate the achievement of pupils, and the teacher is enabled to follow the pupil's growth more closely. These should be made a matter of record. We cannot always trust to memory. If carefully considered, recorded opinion will aid us, and these facts are indispensable.

3. Grades, if properly marked, enable the teacher to make reliable reports. Teachers are changed and pupils are promoted, and unless there are reliable reports, confusion results. No board of education should settle in full with a teacher until a complete and adequate report is made to the successor.

In marking grades, effort, attainment, and growth all deserve to be considered. You must seek as far as possible to eliminate feeling. Mark favorites below rather than above your estimate, and the unfortunate ones above your estimate. If you must err, let it be on the side of mercy.

Promotion should be based upon grades derived from class work and examination combined. I should divide them evenly. Some would place more stress upon class grades. There are pupils who study simply to recite. This is a wrong motive. Study should be prompted by a desire to know. Grades and marking are only scaffolding which enables us to erect the building — of no use in itself, but serving a useful purpose.

In marking class grades it need not be done daily. The highest office of the teacher is to teach, not to place black marks after the names of lazy boys. The teacher may grade one recitation each week, the pupils not knowing beforehand that they are to be graded; or he may make a weekly estimate, giving it always honest, careful attention. This will show very well the progress of the pupil in his work. Do not refer to last week's marks when making the estimate for this week. If you grade with your former estimate before you, you are apt to rely upon or be influenced by it, and this is the very thing you should avoid.

With careful grading, honest work, and enthusiasm on the part of the teacher, what per cent. of the pupils should be promoted at the end of the year? This will vary with the class. There are strong classes and weak classes. Sometimes we may be striving to raise the course of study, and deliberately plan to let only the *fittest survive.* But with regular attendance and a well-graded school at the beginning of the year, there should not be a large per cent. fail to be promoted. With these two conditions — regular attendance and good grading to begin with — at least nine out of ten should be promoted. A larger per cent. of failures reflects upon the teacher: the order was poor, the instruction was not good, or there was a lack of earnestness in school work. Let the teacher examine himself before he condemns too great a per cent. of a class to failure.

These grades, with the attendance, punctuality, and deportment of the pupil, should be reported to the parents each month. Parents have a right to know the progress of their children, and the teacher who does not use a good monthly report of some kind is neglecting an excellent opportunity of securing better attendance, better punctuality, and harder work. The monthly report keeps parents in touch with the school and with what the children are doing. Even if they are not furnished at public expense, they save a teacher in worry and energy many times their cost.

REPORT TO SUCCESSOR.

The greatest hindrance to the successful grading of our schools is inadequate reports to successors. A change of teachers means too frequently the reclassification of a school. What if our county officers, the county clerk, or the county treasurer left such reports, or as frequently happens, no report at all? No teacher should change the classification of a pupil as stated by the former teacher until he has thoroughly tested the pupil's ability for advanced work. Pupils should know that a change of teachers does not mean a possibility of getting credit for work not done.

No teacher's term of school is complete, and no teacher should be paid his last month's salary, until he has filed a complete report to his successor. This report should include: —

1. The name of each pupil and the number of days the pupil was in school.

2. The subjects the pupil studied and his standing in each subject.

3. The amount of work done in each subject and the page where you think the work should begin the next term.

4. A brief summary of the work done by each grade or class.

5. General recommendations in regard to course of study, etc.

A good report can be written out on fools-cap paper. A printed form is valuable, and is much more likely to be filled out, but it is no way an essential. Tell your successor in plain terms the things you would want to know if you were a stranger and taking up the school for the first time. Don't neglect it. Your term is not complete until this report is made. Don't claim your last month's salary until this, one of the most important things, is done.

XII. RIGHT CONDITIONS FOR TEACHING

Before any method or device can be successful there must be right conditions in the school-room. The personality of the teacher is quite as manifest in placing the pupils of the school in the receptive attitude as in the teaching process. It often happens that teachers who understand the laws of mental growth and who have well-laid plans of instruction fail because of lack of government. They do not have that almost indefinable something which commands attention without demanding it.

Not all good teachers are born teachers. We have numbers of sincere, earnest teachers whose results are thoroughly satisfactory, and yet they could not be classed among those fortunate ones who may be called *born* teachers. Skill may come by intelligent study and practice as much in teaching as in hundreds of other walks of life. All that is required is intelligence, hard work, a love for the task, and a determination to succeed.

It is true that in teaching, as in other occupations, we may find those whose God-given talents seem to impel them to the work. They are geniuses in their line. But most of those who believe themselves to be born teachers have a secret reason for their belief, which is nothing more nor less than to save the time and expense of being made. Each teacher should catechize himself: "I am failing here in this; why is it?" In that hour of self-communion — and each teacher should have such an hour once or twice a week — let him earnestly question himself as to the cause of his failure, and the chances are many to one that in seeking the cause of failure he will find the remedy.

There are a few rocks so dangerous, and so many teachers are wrecked upon them, that to point out some of them may not be amiss.

1. Daily Preparation.— It would hardly seem necessary that teachers must be reminded of their duty to prepare each day's work carefully. This preparation should not only include the details of the lesson for the particular recitation, but this lesson should be seen in its relation to the lessons preceding and those to follow. Know what you want to teach; why you want to teach it; what preparation your class has for this new lesson, and how this new lesson is to hinge to the next one. This requires that the teacher have a teacher's knowledge of the subject taught and the proper relation to the other subjects of the school course. This fresh preparation for the work of the day will add zest to the recitation. It will be reflected in the tone of the voice, the elastic step, and the sparkling eye of the teacher. He will not be required to demand attention, his whole attitude will silently command it. His whole bearing will proclaim the importance of the lesson, and the pupils will be aroused to the receptive attitude.

Daily preparation is absolutely essential to the best teaching, however thorough the teacher may have once been in the subject. Too much of our teaching is sleepy, slip-shod, listless, indefinite presentation of a lot of shadowy facts lying incoherent in the teacher's mind, and the results are equally indefinite in the pupil's mind. Stop a recitation, and ask the teacher to recite instead of the pupil, and see how often the record of the recitation will be a failure. Let him have a message to give, a lesson to teach, and let his soul be on fire to deliver this message, and then let him remember the child is educated, not by what the teacher does for it, but by what he causes the child to do for itself, and his teaching results are apt to be safe.

2. *Conduct in the School-room.*— Good order does not mean simply quiet. There is the noise of work, and the noise of confusion and idleness. There is the quietness which comes from interest and study, and the quietness which comes from fear of the teacher. Children are controlled by internal and external motives. You may be a very poor disciplinarian, and have almost deathlike stillness in your study room. It is the discipline of the tyrant, and this kind of discipline is very frequently an incubator for later lawlessness. Can you leave your school-room for ten minutes or half an hour and on returning find that things have gone orderly? If not, why not? Good order in the school-room implies that each child is able to do its best work at any time without external disturbance.

Good order in the recitation requires that the mind of the teacher and the mind of the class be in perfect contact. This is the criterion of all school rules, *How does this affect the unity of the mind of the teacher and the pupil?* During the study period the author takes the place of the teacher, and the same criterion holds good. This will answer a multitude of questions on school government about which the young teacher worries and often consults older teachers. "Shall I permit whispering?" they ask. "Shall I permit pupils in the room to ask questions when I am hearing a recitation?" "Shall I permit a child to get a drink during the school hours?" "Shall I stop a recitation to reprimand a boy?" All these and scores of others may be answered as well as any experienced teacher can answer them by testing them by the above criterion. *Do that which will result in the closest possible contact of the mind of the teacher and the mind of the class.* It is very true we may often have to choose the lesser of two evils, but a reference to the above principle will be the best possible guide. If the conduct of the pupil will continue to disturb the attention of the class more than the reprimand, by all means give the reprimand, but do it so effectively that it will seldom have to be repeated.

3. The School-room at Recess.— Much of the disorder in the school-room is due to the conduct of pupils in the room at intermission. The play-ground and the open air are the places for sport. From the very first pupils should enter the school-room as if it were sacred ground, not necessarily with a long face, but with a feeling that all frivolousness must be laid aside. Running and romping and loud talking and boisterousness at playtime in the school-room lead to familiarity with such things until pupils do not feel that calm which is so conducive to right conduct and proper study when they enter the room after recess. Much of the sacredness, the calm, restful sweetness which comes upon entering the church would be destroyed if all kinds of boisterousness and noisy carousals were indulged in in the church. The same is true to a degree in the school-room.

It is decidedly the duty of the teacher to be in the school-room half an hour before the time of opening school. If a teacher is habitually late, the school board should demand a reform or a resignation. The pandemonium which reigns in the school-room at such times is detrimental to good teaching. If pupils bring lunch, the teacher should remain about the building at the noon hour. Some persons may object to this, and picture the poor teacher eating a cold lunch day after day and breeding dyspepsia with its indescribable nerve-wrecking miseries. While this might be true in rare instances, dozens of cases of nervous prostration may be traced as directly to the seeds of disorder sown in the teacher's absence from the room at the noon hour. And here, too, we should choose the lesser of two evils.

Teachers should see that pupils use proper decorum in entering the school-room after recess. All games should cease at the ringing of the first bell, and pupils prepare to enter the building. The plan of movement here will depend largely upon the size of the school. In cities and large towns, where hundreds of children are to be managed, the regular march is necessary. In smaller places simply falling in line without regard to grade or position in the room may be all that is necessary. But in all cases they should enter the room quietly, and the boys should remove their hats at the door as if they were entering a church or private home.

4. System in Calling and Dismissing Classes.— There must be some system also in calling and dismissing classes. It is not an uncommon occurrence to see a class called and pupils come rushing helter-skelter, hurry-scurry, to get favorite places on the recitation seat. Each pupil should have a definite place during the recitation period. This position will be determined —

(1) By the pupil's location in the room and the consequent position as the lines pass to the recitation seat.

(2) By the congeniality of kindred spirits with which he may be thrown in the recitation. It often happens that two fairly good boys are so constructed that they cannot sit near each other without pinching, kicking, or disturbing each other as well as their classmates during the recitation. Separate such as far as space will permit.

Good order in the school-room and in the recitation are influenced greatly by the tact and good judgment of the teacher in seating pupils. Have a definite signal which calls the attention of the class. This may be a gentle tap of the call-bell or of a pencil, or it may be the counting of "one" by the teacher. At this signal each pupil begins promptly to prepare to rise if the class is to pass to the recitation seat, or to lay aside all unnecessary books or pencils if the class are to remain in their seats for the recitation. When all are ready, the second signal is given, and the class rise and stand orderly. A third signal is given, and they pass quietly to the recitation seat. When all are in place, at a gentle nod of the head or a fourth signal all are seated. If the recitation is to be conducted with the pupils in their regular seats, all books, papers, pencils, rules, etc., not needed in the recitation should be laid aside. These little things are disorder breeders, as they are continually attracting the attention. Flowers, perfume cards, etc., pleasant as they are, often become nuisances in the school-room, as they come too frequently between the pupils and their school duties.

The same plan should be followed in dismissing classes as in calling them. When a class is seated, give ample time for them to get their books and papers ready to prepare the next lesson before the next class is called.

Never seem to hurry; it is a waste of time. Promptness of action, but not haste, is in this as in all things, a time saver.

5. *Dismission.*— It is of just as much importance to have system and decorum in dismissing pupils as in calling them. Here is the one time of all the day when the teacher has the advantage of the pupils, and the one time where he can least afford to hurry. How often the nervous teacher, anxious to be relieved of the responsibility of government, dismisses quickly to avoid confusion. Instead, he should be so gentle and deliberate in his movements that the pupils are quieted and rested. Perfect quietness should precede every dismission. A moment of perfect quietness, a pleasant word, and a deliberate manner of dismissing in the evening acts as a kind of dessert for the day's work, and leaves a pleasant flavor; while a jump and shout, a snatching of hats and a rush for the door will disorganize for a week. Monitors should distribute wraps and everything be made ready, then at the signal all prepare to rise, and the lines pass as quietly and orderly from the building and the grounds as they do to a recitation.

6. *Opening School.*— Too many teachers give little heed to the opening exercises, forgetting how important it is and how it influences the whole day's work. A good beginning may not always presage a good ending, but it often does. The pupils come together in the morning, some gorged upon dainties of all kinds, others from a breakfast of the coarsest of plain food, and others perhaps who may still be hungry. Some are peevish from petting, others sour from scolding, some glad to get to the school-room, others disgusted with its restrictions.

The purpose of the opening exercise is to collect the wandering thoughts of the pupils, drive out all peevishness, and bring the school into a teachable attitude. To do this requires skill and study on the part of the teacher. Nowhere else is there more need for planning and preparation. The teacher must know before the time comes for the opening of school what he expects to give for opening exercises. There must be variety also. Children tire of sameness. It must be definite. It must be interesting. It must be brief and to the point. The following suggestions may be useful:—

(1) A cheerful song, or two or more songs, if the pupils like to sing, makes a good exercise. Singing, not lessons in music, should be a prominent part of the opening exercises.

(2) A solo or a recitation from some one or a duet is good. Let this come as a surprise to the school.

(3) A humorous or pathetic story, if well related or read, is in place. Do not spoil it by tacking a long moral to it.

(4) A Scripture reading without comment is not out of place, and a brief prayer if it come from the heart, may follow the lesson.

(5) A brief news report by some pupil, giving a summary of the world's events for the week, may be made interesting.

(6) Give a brief biography of some of our great men now living, and let it be studied and presented in such a manner as to be an inspiring lesson to boys and girls.

(7) Discuss social questions, such as strikes, elections, etc., being sure to be liberal always in your views and criticisms.

(8) Write a motto or maxim on the board, and discuss its meaning and application with pupils.

(9) Perform an interesting experiment which explains some scientific fact or principle. This, if properly done, begets intense interest and is very valuable.

(10) Short queries, if appropriate, are good.

(11) Information lessons on plants and animals, illustrated when possible by the object or by pictures, will be both interesting and profitable.

(12) Discuss the manufacture of common articles, such as pens, pencils, boots, shoes, buttons, etc. When possible, visit such factories and make close observations so that you can give a clear description. The teacher who fails to visit a factory when he has an opportunity is not awake to his best interests.

(13) Give interesting facts graphically illustrated. For example, we raised two billion bushels of corn in the United States in 1902. Counting twenty bushels to the load and twenty feet of space for the team and wagon, how many times will the procession which moves the corn reach round the earth at the equator? How many tons of water fell in your county last year? How many tons fell upon the roof of your school-house?

(14) Select a number of historic quotations, as, "Don't give up the ship," place them on the board, and have pupils tell when, by whom, and upon what occasions they were used.

(15) Give brief descriptions of historic places and things you have seen. Be modest and be brief.

(16) Describe the habits, manners, and customs of strange peoples of the earth.

(17) Have each pupil give a memory gem. This is one of the most interesting and profitable exercises. Pupils like it, and it stores their minds with beautiful thoughts and gems to cheer and brighten their future.

Make your opening exercise what it should be, and your tardiness will decrease, and the good effects will be felt all day in your school-room.

XIII. GOVERNING POWER IN THE TEACHER

No school can be well organized unless certain regulations can be enforced. If conditions were ideal, the minimum of regulations might suffice; but conditions are not ideal, and we cannot hope for them to be this side of the millennium.

Until much of the perverseness of human nature is overcome, and until the homes become ideal homes, a part of a teacher's energy must be spent in the enforcement of regulations. The government which cannot enforce its laws loses the respect of its citizens. The purpose of the school is to be a positive force, an uplifting force, in the lives of the pupils. The stronger the teacher, the less energy will be expended in the enforcement of regulations; but the *power* of enforcement will be there nevertheless. It is this latent reserve power which marks the strong teacher.

There are two styles of order in the school-room, which may appropriately be called the military and the natural order. In the first the force is external. Pupils may be drilled to clock-like precision in order and movements. Such work shows off well, and it has many strong points. It has, however, many weak points. It is frequently superficial, being thrown aside as soon as the pupil is out of the teacher's sight.

The natural order comes from a majority of the pupils being enthusiastically engaged in school work. They form a public opinion which compels respectful and orderly behavior. The impulse comes from within, is born of a purpose on the part of the pupil, and is lasting.

Governing power is the ability to train the pupil to the habit of self-control. The teacher may master the elements in this power and attain by conscious effort a high degree of success. Among the elements of governing power may be named —

1. System. Much of the lack of order in school is due to lack of system in the teacher. The factors which make up system are time, place, and method. System implies a time for everything. Regularity and promptness are the pillars of good government. A well-regulated program which provides congenial employment for each pupil at each period in the day, is an excellent foundation for good government. System means also a place for hats, a place for wraps, books in the desk, papers folded and placed properly or thrown in the waste basket, building and grounds neat and clean,— all these show system in the teacher.

System means method in doing everything. Precision should characterize all school movements. In calling and dismissing classes, and all school exercises, exactness is desirable. Children thus acquire habits of prompt obedience, and learn to move to the rhythm of society.

2. Energy. The lazy teacher is an intolerable nuisance. Labor is genius. It keeps things moving. It requires energy, plenty of energy, to keep a school going and up to the standard. The lazy teacher lets things drag. He makes no preparation for the recitation, and gives no illustrations. In sleep-inviting monotones he drawls through the weary hours, while disorder reigns and mischief flourishes.

3. *Vigilance.* This is the price of the teacher's success. The teacher may be ever so systematic and full of energy, but if he is successful in government he must know the feelings and purposes of the pupils, and see and hear in detail that he may effectively correct. Vigilance *prevents* faults, and prevention is better than correction. The vigilant teacher watches that he may encourage and train, and not to find fault.

Fault-finding is one of the most pernicious habits. The vigilant teacher does not seem to notice a thousand little faults, but when attention has once been called to a fault, he must never let it recur again without reproof.

4. *Will Power.* This is the force which moves the world. To succeed in anything there must be iron in the soul. Management must be uniform and certain. System must be strictly enforced. The determined teacher will train to orderly habits and efficient work. Kindness should temper firmness, but never displace it.

5. *Self-control.* This is one of the cardinal virtues we must instill into the mind, and it cannot be so effectively taught as by example. The great generals and statesmen have been men who could remain calm under adverse circumstances. The teacher who loses his self-possession and speaks in tones of trembling anger, is far below the ideal teacher, and loses the respect of thinking pupils. He must repress impatience. To yield to it is ruin.

Wesley's mother is said to have told him the same thing twenty times, and many of our pupils are little Wesleys. The teacher must suppress all antagonism between himself and his pupils or patrons. He can do this if he has proper control of himself. Cheerfulness is an electric power, and nothing is a greater aid to self-control or to the control of wayward pupils than cheerfulness. Cultivate it, and never under any circumstances let pupils know they can annoy you.

6. *Self-confidence.* This is a potent power. The world stands aside to let him pass who knows whither he is going. By self-confidence I do not mean egotism. Confidence in your own power to meet the emergency when this emergency comes, prevents worry. It gains the confidence of pupils. Have confidence in your pupils. Trust them, and they will seldom betray your trust.

7. *Good Judgment.* Good judgment in administering punishment is a strong point in school government. The object of punishment is to lead the pupil to see and feel his fault and to strive to correct it. The stronger the teacher is in other elements of governing power, the less frequent will he have to punish. Injudicious punishment makes pupils disrespect the teacher, while proper punishment should increase the pupils' love and respect for him.

8. *Culture.* This is a powerful agency in government. It includes not only the culture of the mind, but the culture of manners and of the voice as well. Thorough scholarship is indispensable, but proper manners are also essential to success. Very often the best of teachers are rendered incompetent by eccentricities of manner and dress. The voice is a most potent factor in the government of pupils. A well-modulated voice, musical tones, and proper emphasis hold pupils and quiet them, while sharp, gutteral tones excite to misconduct.

9. *Love.* The teacher who does not have a genuine love for children and young people should quit the school-

room, and do it promptly. Love wins love. It wins pupils and patrons, but it must be genuine. When combined with judicious executive ability, it will govern a school better than all the arbitrary rules which could be enumerated.

The cold, despotic teacher may enforce quiet and compel pupils to get good lessons, but his tyranny creates an atmosphere in which all hateful passions are fostered.

10. Teaching Power. This enables the teacher to enlist and direct all the energies of the pupil. A small per cent. of good scholars are good teachers. To teach is to arouse, to interest, to direct, and to cause to know. Good teachers magnetize pupils and make them desire to study. Earnest work makes it easy to maintain order.

The teacher who will study his defects, and try to strengthen his weak points, may learn to govern. It requires tact, common sense, skill, and a persistent effort to grow strong in the power to govern a school, but it can be done.

XIV. SCHOOL REGULATIONS

As system is the first element of governing power in the teacher, so it is the first condition of good government. The old-time schoolmaster was all rules and rod. He made a list of the offenses and the penalties. These are of the past, but we must not go to the other extreme. Some regulations are necessary, and are based upon sound principles.

1. Rules should be few. The test of a rule should be its reasonableness in securing the ultimate purpose of a school — obedient, happy, intelligent citizens.

2. Rules should be general and such as apply to all pupils. Special penalties should be rare.

3. The regulations of a school should be so rational that they will command the hearty support of teachers, pupils, and patrons. The teacher must take account of his surroundings. Rules of ever so much importance in a Boston school might not meet the conditions of a school in New Mexico. All rules must be practicable, or they are worse than useless.

4. All school regulations should be educational, and tend to form right habits. If the school is to train for life, its regulations should instil right habits.

5. School regulations should be positive. The rules formerly were a list of "Thou shalt nots." Far better and far more effective would be a list of judicious and well-enforced "Thou shalts."

Upon these principles are based a few regulations accepted by all good teachers and lying at the very foundation of a successful school. They are (1) regularity, (2) promptness, (3) proper decorum, (4) quietness — not death-like stillness, (5) communication made through the teacher, (6) morality. These virtues instilled in the life of pupils will bear fruit, and bring a bountiful harvest from the sowing of the school-room.

The regulations enumerated are the fruit of experience in the school-room. They must be enforced if the school is to be near the ideal. Cheerful obedience is the object to be sought, but obedience at any price.

1. Irregularity is one of the most serious evils. It is the every-day work which counts. Make the school attractive. Make the pupils feel that each day is of great value. Teach well. Interest parents. Show them how it is that irregular pupils become discouraged because they get behind. Urge regularity as a duty, and if pupils are irregular simply from indolence, punish as you would for any other thing detrimental to school work.

2. Promptness. Let the teacher set the example. He should be at school at least half an hour before time to begin. Train to habits of promptness. Enforce it in all school matters until the habit is formed. Use good judgment. There are exceptional cases where pupils cannot be on time.

3. Decorum. Positions, movements, dress, manners. and conduct must be considered. In all these the teacher should be the model. The real worth and power of a teacher may be judged more from the decorum of the pupils than from any other one thing.

4. Quietness. Be quiet yourself, and then make quietness imperative. Many schools are noisy because the teachers are fussy, noisy, and boisterous. Talk in low, even tones, move quietly, and avoid all clapping, pounding, or heavy walking. Secure quietness from principle rather than from fear. The best test is the conduct of the pupils when the teacher leaves the room. We often find teachers who enforce a death-like stillness in the room, but if they chance to leave the room for a few minutes, pandemonium reigns. Never permit boisterousness in the school-room at any time. Much of the noise in the school-room has its birth in racing and boisterousness at recess and before school. Train pupils to think of the school-room as a busy workshop where all is order and decorum. Some may require punishment; if so, be mild and gentle, but punish as for any other offense.

5. Communication. Three fourths of the worry of the school-room will be avoided if all communications are made through the teacher. Be firm from the first day. Appeal to principle, say "*No*" firmly. Anticipate and prevent. Seat pupils where they will have the most favorable influences. Train pupils to habits of non-communication. Inflict proper punishment, and see to it at all hazards that there is no communication, and all will run well.

6. Morality. This is the most important lesson taught in school. The teacher should be the very embodiment of morality. His impulses must be pure and elevating. His character must be such that it will instill into the pupils a love of right and a hatred of wrong. The teacher must be positive also in his teaching of morality.

Attack one vice at a time, and turn your attention to it until it is broken up. Then attack another. Teach pupils to be truthful. Appeal to conscience. Morality has its basis in the conscience of the individual. You have not taught the child to be moral until his conscience cries out distinctly, "*I ought.*" Conscience is a rational motive, and impels us to do what we think is right, and forbids us to do what we think is wrong.

"An approving conscience is the smile of God; remorse, his frown." Sincerity should characterize every act of the teacher. Honesty, purity, and justice should run through his whole make-up. Any system of instruction which stops short of a virtuous character in the individual is a failure. To produce intelligent, conscientious men — men in whom appetite, passion, selfishness, and weakness yield to the mandates of conscience — is the grand end of education. Let us look carefully to our teaching, that it tends to this high aim.

XV. SCHOOL PUNISHMENT

There is a difference in the purposes of punishment in the school-room and in the state. In the school-room punishment seeks to correct and to reform the individual. The state may punish to avenge a wrong, to satisfy justice, or to serve as an example to others. The school deals with immature minds and irresponsible beings; the state deals with mature minds and responsible beings, capable of weighing and judging.

By punishment we mean a penalty imposed by some one in authority for some wrong act. The penalty may be mental or physical. Physical punishment may be used upon children when other means fail, or when the child is still undeveloped in judgment. Parents must, as a rule, occasionally use physical punishment as a means of correcting their children because they are lacking in the judgment of riper years and yet must be taught to mind.

The greatest punishment is that which touches the soul. Physical pain is temporary, but mental pain may last for a lifetime. There are wounds deeper than any rod can inflict, wounds which do not heal, the wounds of sarcasm, suspicion, treachery, and misconception. Teachers must guard themselves against these deeper punishments, unjustly administered, which will rankle in the bosom of the child throughout life.

The subject of punishment is one of importance. No teacher should teach school without having given much thought to it. He cannot plan in advance just what to do and how to act upon a given occasion. However, he may study the principles of the subject in general, and then the details will be more easily and more intelligently applied. What punishments to inflict, when to punish, and how to punish, are questions of vital importance. The following principles should guide in punishment: —

1. *Punishments should be reformatory and never vindictive.* Punishments should be for the benefit of the one punished. Even in the state there is a growing tendency to make punishments more and more reformatory and less vindictive. In school the good of the individual punished should be the paramount consideration.

2. *Punishment should always foster self-control and self-respect.* Self-government alone is worthy of an intelligent man. The punishment which does not stimulate the wrong-doer to forsake the wrong and do the right, is a failure. Any punishment which crushes manhood is fiendish.

3. *Punishment should be the natural consequence of the offense.* Such punishments are corrective. The relation of the punishment to the offense should be studied carefully before it is administered.

4. *Punishments must always be reasonable, but certain.* Punishments which are too severe arouse sympathy for the one punished, and lose much of their good effect. Mild punishments are most effective if they are certain to follow wrong doing.

5. *Punishments should be inflicted deliberately.* Hasty punishments are seldom effective. Both teacher and pupil should have time for reflection, when possible.

There may be times of open insult when punishments must be prompt to be effective, but with wise management such occasions are rare. Parents and teachers must guard against rash and hasty punishments.

6. The teacher must punish with regret. Sympathy for the offender adds to the effectiveness of the punishment, provided the sympathy is not of the sort that excuses rather than punishes. The child knows when the teacher suffers for and with him, and this is one of the uplifting forces in the child's life. It is true that the principle of vicarious suffering is the root of all spiritual healing.

7. All punishment should be made an educative means. It should be at all times corrective. It should bring the pupil to a sense of wrong doing, else it is worthless. The severest punishment is without effect unless the pupil feels deep down in his own consciousness that he has done wrong. Every punishment must be a means to an end, the end being an improvement in the pupil's conduct.

Bentham has clearly stated some of the principles pertaining to punishment as follows:—

(1) "The punishment following an offense should exceed the apparent advantage derived from its being committed."

(2) "The greater the offense, the greater should be the pains taken to secure its punishments."

(3) "Punishment should never be greater than is needed to prevent a repetition of the offense."

(4) "Regard should be paid to the sensibility of the offender, as dependent on age, sex, position, health, etc."

(5) " Punishments should be increased in magnitude as the detection of the offense is uncertain or remote."

(6) " When the offense is not an isolated act, but an act indicating the existence of a habit, the punishment should outweigh the apparent advantages, not merely of the act, but of the habit."

A judicious punishment is one which tends to strengthen in the child a love for right and a hatred for wrong. Punishments must consider many things. What is effective with one may fail with another. The teacher's judgment of human nature must direct what punishment will be effective in a given case. Among the most effective punishments may be named,—

1. Reproof. This will correct a majority of offenses. The earnestness of the teacher gives weight to the reproof. When similar offenses have been committed by several pupils, the teacher may reprove in a general way without mentioning names. If it is an individual or a few individuals and of a nature that it does not affect the school as a whole, private reproof is best. In nearly all cases a short talk in private will be effective. The occasion may arise when the reproof must be administered before the school. In such cases the teacher must not mistake the individual, and must be judicious, else unpleasant scenes may take place.

2. Privation. After reproof, this is perhaps the next best punishment. This should follow as a natural consequence of the offense. The pupil is to be deprived of the thing or the liberty which he has abused. It may be a seat, the recess, a recitation, a class position, or certain privileges.

3. Deportment Records. Monthly reports are powerful levers for right conduct as well as for good work. We speak of their use, and not of their abuse. The monthly report should give the teacher's careful and honest estimate of the pupil's work and conduct. With the good teacher no force is more potent for right behavior. It is an open estimate each month wherein the pupil may read his conduct as the teacher sees it.

4. Suspension. In nearly all cases reproof and privation are all the punishments needed in school. Occasionally suspension, expulsion, and corporal punishment must be resorted to. The stronger the teacher, the more systematic and vigorous the government, the less occasion will be found for such punishments. When the occasion comes, the teacher must have the courage to use it. Suspension may result in good to the pupil suspended as well as to the school. Good judgment must be used to indicate when suspension is necessary, and for how long to suspend, and how the pupil may be restored. Among the causes of suspension may be named insubordination, gross misconduct, chronic irregularity without just cause, little offenses continually repeated but hard to classify, and general worthlessness. The school is a workshop, and no pupil who is doing no good for himself must be permitted to ruin a school.

5. Expulsion. In rare cases, expulsion is necessary. This is the act of the board of education, and not of the teacher. It should be seldom necessary. A frank talk to the parents by the teacher, after all hope of reforming the pupil has vanished, will usually secure the withdrawal of the pupil without the formal act of expulsion. The school board should sustain the authority of the teacher in all right rulings, and the bully who persists in annoying the school should be dealt with effectively, even if it leads to expulsion. The expulsion of a pupil who is doing no good in school is far better than to allow the pupil to waste the time of thirty or forty other pupils.

It must be remembered, however, that the best teachers seldom find bad pupils.

One of the greatest teachers of my acquaintance, after thirty years' experience in the work of the reform school, during which time his work and influence has touched and redeemed hundreds of wayward boys, affirms deliberately that there are no bad boys if we know how to direct their energies. Pupils give us largely what we expect. The actions of many teachers are so contemptible that pupils are almost justified in being bad. They prowl about with suspicion, watching pupils, and hunting trouble. They punish without reason. They constantly nag. They threaten, they bully, they seek to hurt and ridicule pupils. The little boy was not far wrong, who, upon being asked why the teacher punished him, replied, "Because he was the biggest."

Justice does not demand that every pupil be punished alike, even for the same offense. Lottie and Ford were brother and sister. Two years' experience with numerous trials found no punishment, mental or physical, which affected Ford five minutes. For laughing, the teacher pointed his finger in a shaming manner at Lottie, and she sobbed bitterly for an hour. Had both committed the same offense, would the same punishment have been justifiable?

Let your effort be to discipline with the least possible punishment, but when occasion demands and nothing else will do, punish, even to severity. Avoid indignities, such as slapping or boxing the ears, pulling the nose or the hair, or striking the head. If corporal punishment must be inflicted, use a switch, a strap, or a small paddle. Administer it slowly, calmly, quietly, but effectively. When the punishment is over, do not dismiss the pupil until you have talked over quietly and dispassionately the offense and the reason for the punishment. Most punishments fail because they are done hastily and in anger, and then pupils are dismissed while yet white with rage. If the judge sentenced the criminal with the same degree of warmth and passion, and the sheriff executed the sentence with the haste and anger many teachers show in administering punishment, our courts would be less effective than they are.

The best teachers govern so effectively that little punishment is needed.

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XVI. MOVEMENT OF CLASSES

The larger the school, the more *red tape* will be required. Any large business requires system. Red tape should never be used for its own sake. Little is needed in a small district school with one teacher, but in graded schools with several teachers some of it is necessary. In fact, no school can get along without some of it. How much? This question can be answered by any teacher by referring to the principle that *the purpose of school management is to bring the mind of the teacher and the mind of the pupil into the closest possible contact.*

More teachers fail in management than in the teaching process. System and order in management aid the teaching process. Tyranny in the school-room is to be avoided always, but of the two evils tyranny is preferable to anarchy.

I once knew a teacher — a graduate of a famous normal school — in whose school-room chaos ruled supreme. Pupils rushed into the room, talking, laughing, boxing, jumping, and were never quiet. When classes were called, pupils raced and crowded, to get to certain favorite places. As one class was dismissed, the next class came rushing into the recitation seat, all talking, crowding, rushing, pell-mell, hurry-scurry. To observe it without considering the serious side, nothing could be more ludicrous. Pupils frequently climbed over the back of the recitation seat. Half a dozen pupils would come to ask the teacher about this and that while he was hearing a recitation. Such a teacher might get results in a small district school where he did not have to work in harmony with other teachers, but even then the results must be meager compared with what they would be under normal conditions. In a district school, if a recess is not on time, the chances are that few of the pupils will know it, but where there are other teachers, all must work on schedule time.

The rules of school should be based upon principles, always remembering that there should be but few rules, and that these should be rigidly enforced.

1. *Rules must be uniform.* In a school with more than one teacher, most regulations must be uniform. Let the teacher of one room be lax in government, and it affects the whole school organization. Pupils are quick to notice differences, and if one teacher permits certain conduct and another does not, the pupils of the latter are apt to think they are unjustly treated. There must be unity in enforcing many necessary regulations or the school will suffer.

2. *Rules must be necessary.* Nothing for show alone. However, some things which may seem mere show to the outsider are of great help to school government. For example, absolute quiet just before dismissing with a quiet, orderly leaving of the school grounds in the afternoon, is a great step toward controlling a school. It seems to be a tonic which stimulates the better nature of the pupils, and sends them home in a better mood. If possible, let pupils leave school feeling happy.

3. *All signals must be definite.* There should be few signals, but each signal should indicate a definite movement.

4. Tone of voice. Signals should be given in a falling inflection, and the movements should be executed quickly and quietly. Voice has much to do with governing a school. Commands should be given gently, firmly, and the teacher from the very depths of his soul must *expect* his commands to be obeyed. Loud commands or those given in the form of questions, as if the teacher doubted whether they would be obeyed or not, are disorder breeders. Movements should promptly follow a command, and these movements should be quiet and orderly. However, extremes should be avoided. Pupils should be taught to walk quietly but naturally. It is unnecessary for them to walk on tiptoe. What is more comical, and at the same time more distressing, than to see a large, overgrown, awkward boy, a boy who would not under any circumstances knowingly annoy a teacher, cross the floor with a motion similar to a gimlet going through a board.

5. Signals should precede class movements. No movements of classes should be permitted until the proper signals have been given. This is necessary or confusion follows. Time must be given for the execution of the movement before the next signal is given. Teachers often, when time is short, give the signals, "Ready," "Rise," "Pass," so rapidly that the class cannot possibly execute them, and the result is disorganizing. Never permit disobedience, carelessness, or slovenliness. One pupil may soon disorganize a class.

Now let us apply these principles to the movements in the school-room.

1. Ringing the bell. This should be done by the teacher, the principal of a graded school, or the janitor.

CALLING SCHOOL.

Two or three taps of the bell, if it be a large bell, or a vigorous ring of the hand bell, means that all play must stop, and that pupils are to arrange in lines preparatory to passing to the room. This should be done promptly, and when formed and all is quiet, at a signal tap of the bell the lines pass quietly and orderly to the rooms. Give time between the ringing of the first bell and the tap of the bell for the lines to pass, for all the pupils to assemble. Do not permit lagging. Do not ring a tardy bell. It only encourages pupils to lag behind until the last chance.

2. *Attention.* When pupils are seated quietly, at tap of call-bell or pencil the attention of the pupils is directed to the opening exercises or the work of the day. Do not *demand* attention, but *expect* it, and so conduct yourself that you will *receive* it. The governing power of a teacher may be correctly judged by observing the calling of school and the opening exercises.

DISMISSING SCHOOL.

Nothing is better in its general effects upon a school than order in dismissing it. It is the dessert or pastry which follows the meal, and leaves a pleasant flavor of the day's work.

1. Let all books be placed in the desk quietly and orderly at a given signal. See that all scraps of paper, pencil sharpenings, etc., are removed from the desk and floor.

2. Have pupils sit erect — not stiffly — and give respectful attention. If you have announcements to make, be brief and to the point.

3. Never hurry. The greatest mistake the teacher can make is to hurry and dismiss because pupils are restless. This is the one time in the day when the teacher has the decided advantage of the pupils, and he can afford to be deliberate. From first to last, pupils should know that quiet and order precedes dismission.

4. Let pupils march quietly and orderly from the buildings and grounds.

CALLING AND DISMISSING CLASSES.

Many teachers use the signals "One," "Two," "Three," for calling and dismissing classes, some use the call-bell, and some use "Ready," "Rise," "Pass." Whatever is used should be used rigidly, and every signal should be obeyed.

1. *"One."* The class get ready. Until the pupils are familiar with the program, the teacher may name the class before giving the signal.

2. *"Two."* The class stand with the necessary books and papers for the recitation.

3. *"Three."* The class pass orderly to the recitation seat and when all are ready they are seated. Let them be seated in recitation in the order in which they came from their seats. This avoids confusion and enables the teacher usually to separate two *chums* or *congenial spirits,* and this may add much to the value of the recitation.

Let the teacher be the example in system, order, and neatness. It requires only clear ideals of what to do and persistent efforts to enforce these. He must know what to do, why he does it, and then have grit enough to see that it is done. But it pays. It will save nerve force, it will save worry. It will bring a feeling of satisfaction, of work well done. It will train pupils into good habits, and bring the best of results, both mentally and morally.

XVII. BASIC PRINCIPLES OF TEACHING

THE principles of teaching are based upon,—

1. The nature of mind.
2. The nature of knowledge.
3. The nature of instruction.

These principles, stated as they may be in a variety of ways, underlie all good teaching, and are applicable to any subject. The teacher will find that nothing is a better regulator or safety-valve to his teaching than a frequent reference of his methods and devices back to first principles. Let him often catechize himself, "Why do I do this?" "Why do I do this in this way?" "How could I justify this or that way of doing a thing?" "Is this or that the best method, and why?" "Why was it John could not understand that problem?" Very often, when the teacher questions himself carefully and honestly, he will improve, and in a short time get better results. Let us formulate some of these principles under the headings given above.

PRINCIPLES BASED UPON THE NATURE OF MIND.

1. Culture is the primary object of teaching. Culture is the result of mental discipline, and is of more value than knowledge. It gives the power to acquire knowledge, and this power is worth more to us than the knowledge we have already acquired. It gives also the power to originate other knowledge, and to invent new ideas and thoughts. Without culture the mind is a receptacle into which may be thrown thoughts and ideas; with culture these may be arranged and transformed into active energy. Knowledge will make a learned man, but culture alone can make a wise man.

The teacher should never lose sight of this primary object of teaching. It is not the solution of individual problems of arithmetic that we seek, nor the demonstration of certain propositions of geometry. Long after the rules of arithmetic have been forgotten and long after you have forgotten certain demonstrations in geometry and scores of Latin endings, there will remain a residuum, a power, a mental discipline, which we call culture, and this is of far greater importance than the mere facts themselves. The teacher should know the relation of each subject of study to the mental capacities of his pupils, and seek to make each subject contribute its full share to the culture of the child. A neglect of this duty on the part of the teacher has dwarfed and warped and stunted many a child's mind in our schools.

2. *Exercise is the fundamental law of growth.* This law is as true of mind as of muscle. The arm grows strong through exercise. The leg of the pedestrian acquires size and power by use. Lack of exercise makes flabby muscles. In the same way every faculty of the mind is developed and strengthened by exercise. The power of perception grows by exercise in perceiving; the power of memory, by remembering; the power of thought, by thinking, etc. Let the powers of mind go unused, and mental flabbiness will result as quickly as muscular flabbiness when the muscles are not exercised. The unused mind is unfit for prolonged effort. It soon rusts mentally, and becomes worthless. Thousands of minds rust out from idleness, inaction, and want of use; the mind never wears out from use as long as the physical man is in good health.

3. The perceptive powers are the doors to the child's mind, and must be kept open. These powers are most active in childhood. All mental activity has its beginnings in the senses. The child lives in its eyes, its ears, and its fingers, and it delights to see and to hear and to feel. Its eyes and ears are open, and its fingers always ready for mischief. It is the first duty of the teacher to direct this activity, and to give food to the senses. It seeks for expression in actions as well as in words. It needs objects for its instruction, and facts rather than abstract truths for mental development. It needs to see and feel and handle objects for itself, and later it will have the taste and the capacity for abstract thoughts; but to force them upon it now is to cause the worst form of mental dyspepsia.

4. The child's memory for facts and words is strong in early childhood. This fact should not be ignored by the teacher. The objects come to the mind through the senses with such freshness that they are fixed indelibly in the memory. Words and facts stick in the child's mind as naturally as burrs to the sheep's coat. Its memory for words and things is wonderful. A little girl four years old, the daughter of a college professor, uses such words as "examination," "manuscript," "laboratory," etc., correctly and with ease. Seated at the table one cloudy afternoon, the sun suddenly broke through the clouds, and gilded the room. Her father quoted Tennyson's beautiful lines:—

"The splendor falls on castle walls
And snowy summits old in story;
The long light shakes across the lakes,
And the wild cataract leaps in glory."

No comment followed. Some time later the sun shone out again in much the same way, and Esther quoted the lines accurately. A new word once distinctly heard is apt to be a permanent possession. A child will soon learn to talk in several languages if it associates with children who speak different languages. The teacher should give the child an opportunity to store its mind early with facts of science and to acquire a rich and copious vocabulary.

5. *The careful training of the memory should not be neglected.* The mind works according to mental law in retaining and recalling knowledge. It ties facts and incidents together — unconsciously perhaps, but strongly — by threads of association. These facts are made into clusters or groups, and bound into a unit by the bands of association. The teacher should understand the principal laws of association — the law of similarity, the law of contrast, the law of cause and effect, and the law of contiguity in time and place, — and teach pupils to link their knowledge together by these chains. He will find numerous opportunities and find them in all subjects. In geography he should teach the children to associate similar facts about cities and States. In history, events may be associated by contiguity of time and place as well as by cause and effect. All the knowledge taught should be so thoroughly systematized that it may be readily recalled by logical or topical relations.

6. *The imagination should not be neglected.* This is the power of forming ideal creations, and is very strong in childhood. It is made active through the medium of perception. The facts perceived by the senses stimulate the fancy and arouse it into activity. The beau-

ties of nature, the evening sunset, the bending blue sky, and the broad landscape find a resting place in the memory, and lingering there these forms of beauty stimulate new creations. With many children, fact and fancy become so interwoven that they do not discriminate between the two. The teacher in such cases should train the faculty into right channels, and seek to develop it into healthy and normal activity. Often children are untruthful from being unable to discriminate between the things remembered and the things imagined, and such cases need the careful attention of both parents and teacher.

7. The mind of the child should be led from concrete to abstract ideas. The child mind begins with the concrete. It first learns objects and their qualities, and its first ideas are perceptions of things it can see, feel, hear, and taste. These ideas are not abstracted from, but associated with, the object itself. After repeated occurrence of the object with the perception together, it begins to perceive independently of the object, and thus gradually its mind rises to abstract ideas. From objects it gets its ideas of color, from hard objects it gets its idea of hardness, from the kindness of friends and parents it gets its ideas of affection and kindness. This gradual growth from the concrete to the abstract should be carefully watched by the teacher and aided. He must be careful not to lift the child into abstractions too soon, nor keep him too long on the concrete. Concrete examples should be presented first in the presentation of any subject, and the teacher should know that the pupil has assimilated these before he pushes on into the abstract. One of the ever-present duties of the teacher is to aid the pupil from things to thoughts.

8. The mind grows from the particular to the general. The first idea is of a particular object. It is considerably later before it reaches the general notion. The child knows its own dog a long time before it has the general notion *dog*. *Bird* to the child is a particular bird; *kitty* is a particular kitty; *horse* is a particular horse. Gradually it rises from the particular object to the general, from a percept to a concept. It is the teacher's duty during the school life of the child to watch and aid this growth in every way possible. It marks distinctly the class of person and the mental development. Our great organizers are men who can grasp the general thoughts and see great principles behind particular things. On the other hand, the teacher must not force this growth before the child's mind is ready for it. To force the general upon the child's mind before it is prepared is to teach words only.

9. The child reasons first inductively and then deductively. This is the natural law of mental development. The particular facts of the senses are the child's first thoughts, and from these it rises gradually to general truths. After the mind has been impressed time after time and through induction reached a number of general truths, the process then may often be reversed, and particular truths deduced from general principles. The mind also begins to apply the self-evident truths or axioms to the thoughts which grow out of them. This order of development of the mind should be understood by the teacher, and his work of teaching done accordingly. He should especially avoid the too common error of introducing deductive reasoning too early.

10. The teacher should aid the child in obtaining clear conceptions of intuitive ideas and truths. The mental life of the child begins in the senses, and its first ideas and truths are those which pertain to the material world. Later the intuition awakens into activity, and the ideas and truths of reason begin to dawn. Here the teacher, if he is watchful, may help the child. He may do much to develop clear conceptions of space, time, cause, the true, the beautiful, and the good. He may readily make occasions for presenting or developing these ideas, and aid the pupil in reaching these self-evident truths by particular examples and suitable questions. Some of the axioms of number also are awakened in the mind quite early, and the teacher can do much to develop them.

PRINCIPLES BASED UPON THE NATURE OF KNOWLEDGE.

1. The second object of teaching is to impart knowledge to the pupil. The educated person must have certain knowledge. While the power of acquisition may be the primary object of education, it is impossible to conceive of this power being properly developed without having stored the mind with many useful facts. We could not think of a child mastering the subject of mensuration as treated in our arithmetics without having in mind certain facts. We would rightly question the teaching of United States history if pupils could not tell us something of Washington and Jefferson and Lincoln, and of Bunker Hill and New Orleans and Gettysburg.

Knowing how to think may stand first, but it will not suffice. There must be certain facts and knowledge in mind upon which the thoughts are based. The subject of cramming has been rightfully condemned, but it is the abuse of it, and not the use, which should be condemned. Every well-ordered mind, every educated person, has stores of facts well organized and assimilated, all ready for use at any time. The teacher should never neglect to fill the minds of the pupils with the facts of history, geography, science, language, and mathematics, — suitable facts, logically grouped, — and hold up to them high ideals of scholarship and instil into them by example and precept an ambition for wide and accurate learning.

2. Things should precede words. This principle is in harmony with the natural development of knowledge. Objects existed long before words. The word was introduced to designate the object. The genesis of knowledge should be the order of imparting knowledge, and this is in harmony with the laws of mental development. The teacher often violates this principle by having pupils recite words, words, nothing but words, without knowing what they mean. How often pupils commit definition after definition without the slightest understanding of their real meaning. Such a practice is decidedly pernicious in its influence on the mind. It leads to wrong habits of thought, and the child soon learns to be satisfied with the mere symbols of ideas. He is satisfied with the husk instead of the grain, and instead of a healthy desire for knowledge and a growing understanding his intellectual powers are dwarfed, and he is disgusted with the effort to study.

3. Ideas should precede truths. This law, like the last, is in accord with the natural law of acquisition and mental development. Ideas exist in the mind before there are judgments or thoughts. There is an idea of *book* and of *desk* in the mind before it thinks *the book is on the desk.* In arithmetic and geometry, and in the other sciences, the ideas presented in the definitions are learned before the truths which pertain to them. Ideas are the product of perception and conception, while thoughts are the product of reason and judgment. Perception and conception precede reason and judgment, hence these laws are manifest from the nature of mind. The teacher should seek to fill the mind with ideas both concrete and abstract, and then to teach the truths which belong to them.

4. Particular ideas should be taught before general ideas. This principle is in harmony with the genesis of knowledge and the nature of mental activity. Our first ideas are of particular objects. These we derive through the senses. Later come the abstract and general notions derived from the understanding. The child has the idea of the particular house before it has conceived the general idea *house.* It knows several particular houses before it reaches the general of a class of houses. This order is frequently violated in the teaching process. We seek to give clear general ideas when the child has no clear particular ideas. We ask the child to remember that nearly all the lakes of North America lie in a certain line when he has no conception of an individual lake. One of the best teaching mottoes is, " Go from the particular idea to the general."

5. Facts should precede principles. Most of our text-books of late introduce a new subject inductively. When we have called up what the child knows, and run our fingers, as it were, about the edges of its knowledge, we know where we stand. So when the facts stand out clearly, then we may bind them together by principle.

A fact is a truth in the realm of sense. A principle is a truth in the realm of thought. The former is concrete, the latter abstract; and as a rule the concrete should be taught first. A fact is derived from the operation of perception or judgment, and a principle is the product of an act of reasoning; and perception should precede judgment. Facts are particular truths, principles are general truths; and in the teaching process, particular truths should precede general. The principles of science are deduced from individual facts. In teaching the individual, facts should be taught before the principles can be deduced. To reverse the process is to destroy the best results of science teaching.

6. In the teaching of the physical sciences, cause should precede law. Science is organized or classified knowledge. This knowledge is built up from an examination of the individual facts. The natural method of teaching the subjects is along the line of the original development of the subject. In our mental development the cause is sought before the laws. One of the first questions of the child is, "What makes that?" The order of inquiry is, *"What is it?"* for the child; *"How is it?"* for boys and girls; *"Why is it?"* for youth; and *"Whence is it?"* for maturity. Long after the child has satisfied its mind as to *what,* it begins to question the laws which control the facts.

In the development of the race, also, men sought the cause of physical phenomena before the laws. Long, long ago men searched for the causes of phenomena in natural philosophy and in astronomy, being satisfied if they found the mere cause while the discovery of the laws or even the search for them is of comparatively recent date. Then it is well known that the law itself is often easily reached when an accurate knowledge of the causes is at hand. To the teacher who will examine the subject it will be plain that in nearly all cases good pedagogy will teach the cause of facts before the laws which govern these facts.

7. Scientific classification should be taught after an investigation of both the cause and the law of physical phenomena. This law, like the one above, is in harmony with the law of mental growth as well as with the genesis of knowledge in these sciences. The mind can grasp facts, principles, and laws before it is capable of the broad and inclusive generalizations of nature, some of which have immortalized our great scientists of recent years. These last require a mental grasp and breadth of view too large for school-boys' minds. Here again we find the law in harmony with the development of human knowledge. The profound classifications are of recent date, while the facts and principles have been known and studied for centuries.

8. The elements of the inductive sciences should be taught before the deductive sciences. In the inductive sciences the elements are the facts and phenomena. Based upon these, reached by inductive reasoning, are the principles, laws, causes, and systems of classification. We acquire the facts and phenomena through perception, and the child mind may readily acquire many of the facts before it can generalize on them. These come naturally to the mind before the ideas of the deductive sciences. However, it is only the facts and the elements which should precede the deductive sciences, for it is harder for the mind to grasp the laws and causes from a consideration of a number of individual facts, than it is to accept a general law and from this law deduce a number of elementary facts. This would indicate that the simple elementary facts of inductive science, but only these, should be taught before the deductive sciences.

9. A deeper or more formal study of the deductive sciences then should precede a further study of the inductive. This order arises from knowledge and its relation to mind. The facts of the inductive sciences are presented to the mind as early as those of the deductive, but the latter are more easily understood by the immature mind. The judgments in mental arithmetic and much of the reasoning in geometry are more easily understood than the generalizations of botany and zoology. Then the reasoning in mathematics trains the mind to habits of logical activity. In the evolution of the race the principles of mathematics and logic were discovered and developed first; and the order of race development is usually a safe guide to the development of the individual.

10. Psychology or mental science should be studied after the physical sciences. It is more abstract and requires more maturity of thought for its comprehension. The mind should be well trained before it is able to interpret its own operations and processes. The habit of interpretation carried to the extreme with young persons is apt to lead to morbidness of mind. It is sometimes well that young persons are not conscious of all the workings of the mind, for like digestion it often works best when we give it the least thought. This as well as the difficulty of the subject would place it late in the school course.

PRINCIPLES BASED UPON THE NATURE OF INSTRUCTION.

1. Instruction in the primary grades should proceed from the known to the related unknown. The teacher should know the boundaries and limitations of the child's knowledge, and then he knows where to begin with new knowledge. The known must form the stepping-stones to the unknown. We interpret the new knowledge by relating it to the old. The law of apperception is a helpful one to the teacher, and perhaps no law is more often violated. The child should begin the study of algebra by relating it to the principles of arithmetic with which he is already familiar. The more closely he relates these, the more firmly will he grasp the new subject. Most of the higher subjects may be linked to the elementary, which not only makes sure the new knowledge, but reviews and fastens more firmly the old.

2. The deductive process may often be used in advanced instruction. That is, the instruction may sometimes proceed from the unknown to the known. The child may sometimes fix in memory what he does not understand and afterward get a clear idea of it. Each of us can recall where things long remembered may suddenly come to us with new force and a clearness which make us wonder why we did not see them before. The war on the "old education method" was not so much because it went from the unknown to the known as that it failed to get to the *known.* An hypothesis is often assumed from which we reason to known facts, and thus establish or refute the hypothesis. In algebra we must often trace the relation from the unknown to the known, and the same is true in geometry. The fault is not so much in the method itself as in its execution — failing to reason to the known.

3. Primary instruction must begin with the concrete. The senses are the gateways to the mind. Through them and them alone at first do we reach the mind. In number the teacher should present the objects first. Pencils, pegs, tooth-picks, crayons, marks, cards, papers, small corn-stalks, etc., will answer the purpose. Use these, and see that pupils get through them clear concepts of number in the abstract. In compound numbers make sure that pupils get correct notions of pints, quarts, pounds, pecks, bushels, feet, yards, inches, etc., by using these measures until the children have formed correct concepts of their size. In geography, along with their definitions of capes, bays, isthmuses, volcanoes, etc., use pictures and drawings, making sure that pupils understand the terms. If primary work is properly done, the child can pass gradually to the abstractions necessary in the sciences later.

4. The concrete must not be carried too far. The objects are necessary at first, but they are only the scaffolding, and should be removed when the building is complete. The mind uses the concrete object to aid it in grasping the abstract thought. It hobbles for awhile on the crutches of sense, but it must learn later to soar into the realm of the abstract. The thought may then be grasped without illustration or representation of the object. To depend upon objects too long in number work is to weaken the child's mind for mathematics. The child must be trained to hold some of the results in mind. It is well to develop the multiplication table by the use of objects, but unless the results are retained in the mind, the child is weakened in its power to apply the multiplication table to the practical things of life. To show by objects how the results of the multiplication table are derived is well, but until the child has these results so perfectly in mind that they are almost a second nature, they are not ready to leave it. Many moral lessons given by the use of objects is a degradation of the great moral truths, to say nothing of the degradation of the science work itself.

5. *In primary instruction we may use analysis and synthesis.* The first is better in some subjects, and the second in others; while in other subjects both methods should be combined. In reading by the word method, which seems the most logical of all the methods of teaching reading, the word is taught as a whole first, then words are combined into sentences,— a synthetic process, — and later the words are analyzed into letters — an analytic process. Pronunciation also goes by synthesis and analysis — first a synthesis of sounds in the words, then the analysis of the word into its elements, and last a synthesis of the elements into words. Grammar should be taught first synthetically and then analytically, and later the two methods combined. In geography we begin with the school-house and grounds, and proceed to the township, county, State, etc. Then we may use the reverse process and begin with the world as a whole and by analysis come down to the details of the subject. In primary arithmetic addition precedes subtraction, multiplication precedes division, and in arithmetic solutions we use both analysis and synthesis.

6. *Analysis and synthesis are often combined in advanced studies.* Sometimes analysis is the best method, and sometimes synthesis, and often the two are combined in different degrees in the same subject. In the natural sciences the pupils should analyze for the

elements, and then synthesize these elements into science. The facts are to be found and grouped into classes, and the phenomena combined so as to explain their law and their causes. In elementary mathematics, synthesis prevails; while in advanced, the analytic, and this seems the typical order for all the higher studies.

METHODS

XVIII. READING

Some one has said that all education consists in learning to read. While this is an overstatement, reading is an essential to most school work, and to teach a child to read is one of the first duties of the teacher. The two essentials of reading are —

1. To read intelligently.
2. To read intelligibly.

To these two essentials may be added two other points of much merit,—(3) to read forcefully, and (4) to read gracefully. These four points give the essence of all good reading, and good teaching strives to attain these ends.

The purposes of teaching the child to read are —

1. To enable him to gain information.
2. To enable him to impart information.
3. To gain pleasure from reading.

These purposes should be kept constantly in view by the teacher. From the very first pupils can be trained to gather the thought from the page. It may be very simple thoughts at first, but the pupil must realize that the page speaks to him. He then begins to acquire knowledge. Then, too, he must impart this knowledge to others. He must tell them what the page says to him.

Last, but not least, is the pleasure that reading will afford him in after life. The pleasure of reading books, magazines, and newspapers, to glean from the printed page the world's events for the day, or week, or month, to see with the mind's eye the happenings of the world — this is a pleasure which, never experienced, makes the mental horizon little larger than the physical. Not only this, but reading unlocks the beauties of nature and art, and reveals the æsthetic pleasure which comes from reading pure literature.

Reading not only gives pleasure to the reader, but oral reading, if well done, is a source of pleasure to the hearer. Oral reading, as it was formerly taught, was mechanical. Later it was imitative of the elocutionist. Oral reading should be the correct and natural expression of thought. When to this is added a pleasing voice, the fireside reading circle in the home may be made a pleasure indeed.

Silent reading, however, is of most importance. To train the pupil to think and to grasp the thought of the printed page is the great task of the teacher. "Systematic reading," says Russell, "is the valued means for cultivating reflective habits of mind, which is study, not perusal,— reading which is tentatively done, carefully reviewed, exactly recorded, or orally recounted."

The pupil should soon learn to enjoy reading solely for the sake of reading. Choice stories, biographies, interesting histories, anecdotes, travels, and clean fiction should be placed in his hands early, and a taste for reading cultivated. This will give an impetus to the pupil, and if wise selections are made for him he will soon form a taste for good reading. It will prove both interesting and profitable. If silent reading were encouraged at home, and pupils were given access to books, much of the school-room monotonous drawl would be avoided. Pupils should be trained to read as fluently as they talk.

Not only that, but they should be taught to talk gracefully and freely.

So many pupils spell out laboriously the printed words from the page without getting any meaning from them. Whenever the child can feel that the page is speaking to him, whenever he has mastered the mechanical forms until there is contact with the author's thought, then reading becomes a pleasure.

There are at present three common methods of teaching the child to read, with half a dozen other methods which vary slightly from the main ones.

THE ALPHABET METHOD.

This is the method our fathers and grandfathers were taught. A large majority of men and women of middle age were taught by this method. It consists in learning first the names of the letters, and then combining these letters into words. Perhaps most of us are familiar with the short words *ba, be, bi, bo,* etc. The alphabet method is now almost obsolete, and teachers have sometimes gone to the other extreme. The English alphabet consists of twenty-six letters, and there are upwards of forty sounds in the language. This makes it a difficult task to teach the child to read by this method. Then it is not good philosophy to call attention to the parts before the whole. Children taught by the alphabet method lose much time before they are able to read fluently. Teachers are few who have not been annoyed by the pupil taught the a, b, c's at home, and instead of grasping the form of the word at a glance, stops short and begins to spell the word in a coarse whisper. The mind of the pupil is intent on the parts of the word instead of the word itself.

While the alphabet method is not the best one for teaching the child to read, the other extreme is also to be avoided. Children should not be left helpless in learning new words, and to learn the parts of the word early is one of the best preparations for mastering new words. After the child has learned to read short, easy sentences, the attention should then be directed to the letters which compose the word. Spelling and reading must, in a degree, go hand in hand from this on.

The word method is the natural method of learning to read. The child learns to speak words. The mother points to the object and calls the name. What would be more ridiculous than when the cat enters the room for the mother to point to it and say to the child c-a-t. Yet this is just the method employed when pupils are taught the letters separately first. If the child learns the spoken word as a unit, it would seem proper that he learn the printed word the same way.

THE WORD METHOD.

A child entering school knows a large number of words, and knows them as well as he will, perhaps, ever know them, that is, the meaning of them. Show the child an object, then show him a picture of it. Teach him to discriminate between the two. Then show him the written or printed word, and teach him that this, too, represents the object. He should then grow familiar with the written or printed form until when he sees that form he thinks of the object as readily as if he saw the picture of the object. It is not hard to select a list of objects which can be represented thus. Verbs, adjectives, and some parts of speech are not quite so readily taught. Yet the child is familiar with these words, and after a very few lessons will begin to recognize the written or printed form of these words as readily as the picture.

The child should be taught thoroughly a dozen or more words. Then these words may be grouped into short, easy sentences. All new words in the reading lesson should be studied as individual words before the child begins the preparation of the new lesson. After the child has learned a hundred words or so, the letters may be taught. After that time new words are to be taught as a unit and afterward divided into their parts, and the spelling and syllabification should form part of the drill on the new words.

Children taught by the word method do not drawl out their reading as those taught by the alphabet method. The teacher must strive always to have the pupil get the idea back of the printed characters. Is it not a common thing for pupils to read in a high-pitched, nervous voice, as if they were standing on tiptoe reaching after something just above them? Stop the pupil, and have him tell you what the book is saying to him. Then the chances are that he will speak it naturally. Then have him read in that tone of voice as far as possible. By a judicious use of the word and alphabet method, with constant attention to the thought behind the printed form, our best teachers secure excellent results.

THE SENTENCE METHOD.

For the last decade or more some most excellent primary teachers have been using the sentence method. This is dealing with the sentence as the unit instead of the word. It cannot be questioned that most excellent results have been attained by this method. A skilful teacher will get good results. Pupils taught by it seldom drawl their reading. Its advocates urge that even with the isolated word used by the child, as he is learning to speak, is in reality a sentence, the other words in the sentence being understood. The sentence method, its advocates claim, is the natural method of learning to read.

Besides the three methods mentioned there might be named the word-building method, the object method, the phonetic method, the phonic method, and others. These, however, are but various combinations of other methods, rather than distinct ones.

Let it never be forgotten that the earnest, conscientious teacher who is intent on teaching the child to read, and whose wits and ingenuity are all brought to this important task, will succeed by any method. Like most other things, there are good and bad methods, but results are more important than methods. The teacher should understand the underlying principles of a number of methods. Then by careful study and faithful preparation of the work, many variations will be suggested which, perhaps, will fit some particular pupil or condition.

One great difficulty in pupils learning to read is the lack of the same words used in different sentences. If pupils could have two or three readers with the same words used in each, but the story different, much time would be gained in learning to read. Teachers can do much to help pupils over this difficulty. If the teacher would take the time and trouble to prepare a reading chart, using no word except those which the pupil had used in previous lessons, and combining them into short and simple stories, it would be a great help to his classes. These sentences could be written on the blackboard, or neatly written and copied on the hectograph, where the pupils did not have supplementary readers. Then too, the teacher arranging his own lessons can arrange them to suit a particular class or occasion. A little simple story in which the names of one or two pupils of the class may be used, will arouse an intense interest, and after a few weeks' use of such supplementary work great improvement in the reading of the class may be observed. Let me say that the teacher who does not have a hectograph or some other good duplicating device, is much handicapped.

Pupils should be brought to a stage of self-helpfulness as soon as possible, that is, they should be taught to meet and master new words without help from the teacher. Perhaps the best incentive to this is a book of interesting stories, with good print and simple language, something which appeals to the child. Of course, the same story will not appeal to all children, but the child is rare to whom no sort of story will appeal. When the child wants the story bad enough to make an effort to master it for himself, the way is paved to good reading. If the teacher in the school-room or the parents in the home would read interesting stories to the class, leaving the story at an interesting point, and then encouraging the children to complete it alone, it would be a great help in school work.

The child should, from the very first, hear good reading. The high-pitched, gutteral tones heard in many school-rooms may soon be done away with, and even, gentle, musical tones be substituted for them by a change in teachers. It is a good share of a liberal education for the child to hear daily a well-modulated voice. Like music, it softens, refines, and elevates. If teachers could hear their own voices from a phonograph, it would work wonders in the school-room. Children who have the privilege of hearing good reading daily are fortunate indeed.

To make haste slowly in teaching the children to read is good advice. Children should master the words of each lesson in the primary grades before going to the next. If the children grow tired of the lesson before the words in it are mastered, re-write the story, using the same words, but putting it in different form. Here is where a good duplicating device is so helpful. There is a limit, however, at which further reading of the lesson is almost useless. In the grades a lesson is often so completely thrashed over that pupils are disgusted with it. Perhaps there is not a teacher but can recall in his own student days lessons which were read and re-read until they grew sick and tired of them. It is at such stages as this that an interesting story, biography, and the supplementary reader is so much valued. It adds renewed energy on the part of the pupils. In reading, as in everything else, the time is utterly wasted unless there is effort and mental activity on the part of the pupil.

Teachers should, as soon as pupils get over their timidity on entering school, insist upon an easy, graceful posture while reading. Slovenly habits formed here cling through life. This need not be made a hobby, as is was formerly in the schools, but it should not be neglected. Insist also early in school life on distinct articulation. The teacher can leave his impress, to a very great extent, on the community by insisting upon perfect articulation, and drilling the pupils in that line. We would not, of course, think of the teacher being pedantic in this particular. In a certain sense there may be a local color in pronunciation. It would be as much out of place for the teacher to insist upon his pupils observing certain sounds of " a " which prevail in the East were he teaching in the West, as it would be for the Westerner to insist on the flat sounds of the same letter were he teaching in the East. In teaching, as in other things, the teacher must use good common sense and avoid being a pedant.

There are numerous other little points which the teacher must teach his pupils to guard against. They must be taught to read neither too fast nor too slow, too loud nor too low. Break up the sing-song, monotonous reading so often heard. This can be done by stopping a pupil and having him express the thought as he would were he talking. Drawling must also be prevented. Children are imitative, and bad habits may be characteristics of the individual school. It is the teacher's business to prevent, as far as possible, such habits. Then, too, the sing-song tones heard in reading poetry should not be tolerated. This comes from not connecting the sense with the thought of the poem. There is, it is true, a rhythm in poetry, but when the reader really gets the thought, the sing-song will not be heard.

ADVANCED READING.

Reading is too much neglected in the advanced grades. Many teachers work faithfully and earnestly with the first, second, and third grade reading, but neglect it in the grades above this. This is a great mistake. In the higher grades many failures come from not being able to interpret the printed page. In fact, many of the mistakes in arithmetic are in reality but lack of power to master the English. Time after time do we see pupils whose failure on a problem is a failure to interpret the language. Through all the grades of the common schools there should be some attention given to reading as reading. It may not be daily, but it should be a regular and systematic drill in reading.

Children in the upper grades should read literature; whole selections of literature, not scraps. It is unpardonable that in many schools pupils in the advanced grades leave school without ever having read such beautiful and inspiring selections as "Evangeline," "The Courtship of Miles Standish," "Snow Bound," "Enoch Arden," "King of the Golden River," and scores of others equally interesting.

The successful teacher of reading in the advanced grades must believe in his subject. He must believe that to lead the pupil to the proper appreciation of the selection of pure literature is to place the pupil on a higher spiritual plane. Such an appreciation will lift him above much that is low and groveling and vicious, and give him a constant companion and monitor which, like David Copperfield's Agnes, is always pointing upward.

To teach successfully, reading or literature, in the advanced grades requires that the teacher must be familiar with the selection to be taught. He must understand it in all its bearings. He must have studied it earnestly and carefully, and then he must have planned how he can best present it to the class so that they will get the most out of it. Less than this is to make reading in the advanced grades a mere farce.

No subject in the whole school curriculum is more inspiring than literature. It appeals to the universal in mankind. The lessons it brings are the ideals of the soul's possibilities. It quickens in the individual soul the inspirations which are universal. The beautiful friendship of Damon and Pythias is above our selfishness, lifting us above ourselves, creating in us higher aspirations and showing us our own possibilities. The soul is constantly struggling to free itself from bondage, and every time a limitation is removed it leaps with joy. The reader, if he really reads, is forced to live, for the time, the ideal life pictured in the literature, and thus from day to day his soul attains to higher things. Children whose hearts and minds are not open to such influences lose some of the most potent influences to a higher life. Let me plead with you to introduce the children to whole selections of pure literature in the advanced grades in reading. It may prove the rising-bell in the soul of hundreds of pupils. The inspiration, the uplift, and the noble sentiments planted in the hearts of pupils at this stage will yield golden fruits of better things in after life.

In teaching reading in the advanced grades, broad and accurate scholarship in the teacher will count for much. His reading and study should have made him familiar with the geographical, historical, and mythological characters. The beauty and sublimity of much of our literature hangs upon the suggestive forces of such references. The teacher to whom such references appeal not can never be an ideal teacher of reading in advanced classes.

Teachers frequently find it hard in the intermediate and higher grades to interest pupils in their reading lesson. It is so often true that pupils work faithfully on arithmetic, history, geography, or grammar, but do not think it necessary to look over their reading lesson until time to recite. They do not study their reading lesson. The following little devices may be suggestive to many teachers, and serve to break the monotony, and add spice to the reading class. Teachers should never lose sight of the great purpose of teaching reading, that is, to train the pupil to grasp the author's thought from the printed page. Keep the minds of your class alert at all hazards.

1. A word-pronouncing contest is a good stimulant to class interest before the recitation. Pupils must be able to call every word at sight. Drill them on the list of new words and old ones, which are liable to give trouble, from the book or on the board. They should be able to recognize any word quickly at sight. Write the word on the board, and have the pupils call it as soon as they recognize it. After the words are written on the board, number the pupils in your class, and pointing to the word, call the number of the pupil. The pupil is to pronounce the word quickly and accurately. This drill will be both pleasant and profitable.

2. In primary classes pupils will take great pleasure in chalk talks. That is, the teacher will make the chalk give the command to some member of the class. As soon as the pupil can read the command, he performs the act. Pupils will soon learn to make the chalk do the talking, and will take great pleasure in writing sentences, which the others must interpret and perform the act without being told.

3. Question pupils on their reading. This is a splendid exercise to secure proper emphasis. Place such a sentence as, "That little girl writes very fast," on the board. Then question the class and see how properly they emphasize the words to bring out the meaning. Who writes very fast? Which little girl writes very fast? How does the little girl write? How fast does the little girl write? Such questions will not only lead

to proper emphasis, but to the proper interpretation of the sentence.

4. Have the pupils read the paragraph silently, then call upon one or more to give the thought of the paragraph in his own language.

5. Make sure that the pupils have really studied the lesson before beginning the recitation. The teacher must know the lesson so thoroughly that he knows the story in all of its details, and then with books closed he questions carefully and completely until he knows just the pupils who have made a thorough preparation of the lesson. If pupils know that such a quiz is coming, they will not often neglect to thoroughly prepare the lesson.

6. While it is not a good thing to criticize too severely nor to permit the pupils to criticize one another until after the pupil has finished the paragraph, it is often an interesting exercise to call on a pupil to read until he makes a mistake. When he makes a mistake, he may be seated while another is called upon.

7. A good drill in securing attention to the reading is to have each pupil in the class numbered. One pupil is then called upon to read, and at irregular intervals the teacher calls out the number of some pupil. This pupil must then take up the reading at the proper word, and continue until another number is called. This requires, of course, that each pupil give careful attention to the reading in order to know where to begin should his number be called.

8. When pupils tire of the regular reader, have supplementary work, either in other readers or stories and

current events journals. This is not only a rest from the routine reading work, but cultivates outside reading.

9. Select an interesting story from some paper. Cut it into a number of parts, and distribute these parts among the pupils, then let the first read, and the pupil holding the next part must rise and read as soon as the first is completed. This is a good test of whether pupils are really following the thought of the story.

10. Drill pupils on correct pronunciation. While it is a mistake to be too critical, especially with timid pupils, there is nothing so beneficial as a teacher with careful and accurate pronunciation. Drill pupils on words mispronounced. The pronunciation of the word *literature* tells very much as to the training in pronunciation. Strive to overcome local peculiarities of pronunciation. If the teacher is popular with the pupils, they will soon accept his pronunciation, and do much to correct faults among themselves by criticising one another.

XIX. WRITING

WRITING is not so much a study as an art. The pupil should learn to write from the very first, and daily practice in writing should continue through at least the first six grades. To write a neat, rapid, legible hand is a great accomplishment, one which is worth much to pupils in after life. Nowhere can the teacher see himself reflected more quickly or more perfectly than in writing. If he is neat and writes a good hand, the writing will improve. If he is a poor penman and careless, the pupils will grow indifferent. The popular teacher can see his own handwriting reflected in the writing of the pupils, even to the crossing of the t's.

Teachers should be careful to get neat, legible forms of the letters fastened in the pupils' minds from the very first. With larger pupils who have acquired improper forms, nothing is a better corrective than an analysis of the letters into their elements. This with much drill on the simple elements will help. Do not follow fads in teaching writing, but teach a plain, simple hand. The vertical, the half slant, and other systems have their advocates and their day, and like other fads are soon forgotten. In this as in many other things the system is of less importance than results.

The two tests of writing are legibility and rapidity. In this age of push and hurry there is little place for the old-time writing master with his painstaking, accurate copy. For four years in early life my teacher urged us to write slowly and carefully, and it has been a detriment to me ever since. Finger movements became habitual, which have never been overcome. The slow, labored movement is always at a discount. The teacher who does not drill on easy, rapid muscular movement in the class until it becomes habitual with the pupils, is a poor teacher of writing. Good, easy, rapid movement, with legibility, will constitute good writing, whether the writing conforms exactly to any system or not.

The teacher should insist upon neatness in all written work done in school, and should set the example. This with daily practice will secure good results. As soon as pupils are large enough to use ink without spilling, they should be taught to write with a pen. Daily practice with pen and ink should follow for several years, until pupils write a neat, rapid, legible hand.

Use practice paper, and drill on movement until pupils gain perfect control over the muscles. It is to be regretted that so many States make the use of the copy book obligatory. When the teacher is an unusually poor writer, the use of the copy book may be an advantage, in that it gives a good form for the pupils to follow. But if the copy book must be used, it should be supplemented daily by practice on free muscular movements, and good writing paper is much the best for this. Use good paper, a good medium pen, and black ink of a good quality.

The teacher will find it best usually to take charge of the paper, pens, and ink at the close of the practice period. The ink may be labeled with the name of the owner. Three monitors from each row of seats may be appointed, — one to collect and distribute pens, another ink, another paper and copy books. These may be kept safely on a shelf or in a book-case. The privilege of acting as monitor may be made a reward of merit, as most pupils will take pride in performing these duties. It will take but a minute or two to collect and distribute writing material, and there are less accidents with ink and cleaner copy books. As the advanced pupils may need pen and ink at any time, the paper or copy books only may be collected, and the pupils in these grades permitted to retain their ink and pens.

Teach pupils to sit erect and to hold a pen properly from the first. It is easier to prevent pupils from forming bad habits than to correct these habits after they are formed. Almost any good copy book will discuss the position at the desk and the proper way to hold a pen, and this is the most valuable part of a copy book. The advice of the copy book is good, but to their use is attributed very justly much of the slow, laborious, cramped writing.

Select a number of good muscular drills, and have pupils practice them until they have a free, easy muscular movement together with correct form of letters. When this is done,— and by good example and persistence it can be done,— the problem of writing is solved, if the teacher will then insist that all written work be neatly and properly done.

XX. SPELLING

The subject of spelling has been greatly overestimated by some teachers and greatly underestimated by others. Teachers in the past, many of them, made it a hobby in the school, and later many teachers treated it with neglect, not to say contempt. There is no great credit in being a good speller, but there is great discredit in being a poor one. A few years ago, to my personal knowledge, a strong man was an applicant for a school position. In almost everything he was well qualified for the place, and would have been elected to it but for a letter containing some misspelled words. He could not spell. His mind seemed unable to take in details, and very simple words were often misspelled.

We may call it a mistake of the hand rather than of the head, but the consequences are the same. In the language of Dr. Currie, " Spelling is an art the possession of which procures no credit, but the want of entails disgrace." Professor March says, " Stress is laid on spelling as the sign of a thoroughly educated person out of all proportion to its real value." Correct spelling is, however, and rightly should be, regarded as one essential of an educated and scholarly mind.

In the old-time school, spelling was a fad. It was at a time when the subjects in the school were few. Later, as new and richer subjects began to be introduced, spelling began to lose its place. Ciphering matches, history and geography games, and such recreations began to unseat spelling, which had held a monopoly of the matter of school entertainment and had received the plaudits of thinking people and people without thinking. Thus spelling was eclipsed in interest, and for a time was greatly neglected.

It was found, too, that many who could stand and spell well orally were poor spellers when it came to writing. Educators then began a crusade against so much time being wasted on spelling. It dawned upon the rank and file of teachers that writing was the only test of spelling. Perhaps you may know me for years and never know whether I am a good speller or not, for the chances are many to one that I shall never give you an opportunity to stand me up in line with a number of other persons and spell down. But if you should receive a letter from me, even though it be a short one, you may with a fair degree of accuracy judge of my ability to spell. *Writing is the only real test of one's ability to spell correctly.* Then came a reaction against oral spelling. The pendulum swung to the other extreme, and for some years teachers practically discarded oral spelling.

It was not surprising that this reaction should come. Less than a quarter of a century ago the old blue-back speller reigned supreme in many schools. When a boy, I spelled through McGuffey's spelling book — I have no idea how often we turned back — before I began to read. I used the spelling book until I was ready for the fourth reader. How vividly some of the scenes come up before me! A long line of boys and girls "toeing a mark" down one side of the school-room and partly across the end, spelling for head-marks and knowing the penalties of failure. To miss three words meant to stand on the floor ten minutes; to miss more than five words, to stand on the floor half an hour; and if we could not spell all the words by that time, we continued to stand until we had learned them.

As I recall the method of teaching spelling in that school, I note two great mistakes:—

1. There was no effort to bring the words into the child's experience or to teach the meaning of the words "balcony," "barony," "baronet," etc.— the first could have been explained to me, the second and third were beyond my experience. I doubt if my teacher's conception of them was much clearer than my own. I stumbled and staggered over the word "vial," never thinking for a moment that it was a little bottle. The word "patent" I spelled over and over again without any thought of what it meant. Had the teacher given "a" the short sound instead of the long sound and told me the words were the same, I should have had at least a vague idea of its meaning, as I had heard the word pătent used often, and even knew that when a man had a patent on an article no one else had the right to make it.

2. The pupils were not taught how to study. Instead of looking at a word long enough to get a clear and lasting impression and thinking it over until we had mastered it, we were seeing how often we could study over the lesson. We began at the first word and spelled rapidly through the lesson, giving no thought except to *study it over*. That dreaded disgrace of standing on the floor — we wanted to justify ourselves by the number of times we studied our lesson. My old speller shows by the marks in the margin that I had studied the lesson thirty-three times. I should have had it committed to memory in half that time had I really studied it. In fact, had I really studied the lesson properly, I should never have thought of keeping a list of the number of times I

spelled it over. In spelling, as in other subjects, the teacher comes far short of his duty to the child if he does not often instruct him how to study with best results and least loss of time, and see to it that he forms habits of such study. One of the greatest wastes of time comes from not knowing how to study, and from this ignorance come wrong habits of study detrimental to the child all through life.

Why is spelling hard? It is due primarily to the irregularities of English orthography. There are over forty sounds in the language, and only twenty-six letters. Then there are so many irregularities on account of silent letters and the different letters and combinations of letters to represent the same sound. These irregularities are accounted for by the history of the language itself. The Anglo-Saxon was first reduced to writing by the Roman missionaries. They used the Roman letters with few modifications, and fitted the sounds of these letters to the sound of the words. Then came the Norman Conquest. The Normans and the Saxons could not pronounce each other's words correctly. The more scholarly tried to hold to the book-forms, but the Normans dropped the special Anglo-Saxon discriminations, and left many of their own letters in the words which were not sounded by the people at large. Changes in the vowel sounds then followed. Inaccuracies and carelessness in authors and copyists also contributed to these irregularities. Wide license prevailed before the time of printing. Proper names were found recorded in a variety of ways, and the same name was often spelled in a number of ways in the same document. Disraeli states that Leicester has subscribed his own name in eight different ways, and the name Villers is spelled fourteen different ways in the deeds of that family.

These irregularities have raised the hue and cry for reformed spelling, and let us hope that the near future will see many common-sense changes in the spelling of a large number of our words; but until such changes come, the teacher's duty is to take the language as it is and make the best of it.

METHODS OF TEACHING.

The Oral Method.— By this method we mean the old-fashioned oral spelling. It teaches spelling by naming the letters of the words, and this is based upon the principle of fixing the letters of the word in memory by calling them in regular succession. It appeals to the sense of hearing and the observation of the printed form. Most of us learned to spell by this method, and it has some decided advantages.

1. It teaches pupils to pronounce words. The old plan of spelling i-n in, c-o-m, com, incom; p-r-e pre, incompre; h-e-n hen, incomprehen; s-i si, incomprehensi; b-i-l bil, incomprehensibil; i, incomprehensibili; t-y ty, incomprehensibility may sound antiquated, and perhaps it is, but nothing is better to make the pupil independent in pronunciation than well-directed oral spelling.

2. It teaches syllabification, and this is sadly neglected in the ordinary method of teaching written spelling. Correct syllabification is a good start toward correct pronunciation, and if incorrect spelling leads to disgrace, incorrect pronunciation points the way and gives you companions to lead you on.

3. It admits of many interesting methods of competitive recitation. While, as stated before, the old-time

spelling match has lost much of its interest, it is thrilling yet when compared with a written spelling match.

There are also some disadvantages:—

1. Pupils taught by the oral method are not necessarily accurate spellers in writing. Errors in writing may come from two sources: First, it may be a mistake of the head. Such mistakes will use wrong letters in the words. The writer misspells because he does not know how to spell correctly. The second is more a mistake of the hand than of the head. Such mistakes are usually letters omitted. The hand cannot keep up with the thought. Practice, practice of the head and the hand combined, is the only remedy for this. This disadvantage is all the greater when we consider that the practical need of spelling is in writing.

2. Another disadvantage is that each pupil of a class cannot spell as many words by the oral method as by the written. Pupils sometimes count which words will come to them, and omit the study of the others. This objection can be largely obviated by promiscuous pronunciation in the recitation. Then if each member of the class gives proper attention, he hears and thinks the spelling of each word, and this gives practically all the benefit of the written spelling.

THE WRITTEN METHOD.

This method teaches spelling by writing the letters of a word. Its principle is that of fixing the spelling of a word in memory through the sense of sight and the muscular sense of forming the letters. "Things seen are mightier than things heard," is one of the maxims of the advocates of written spelling, and to this they might add another, "Things done are more impressive than things seen only." The superiority of the method is not so much in the sight alone as in the actual construction of the word which enforces the impression on the mind. The child can *see* the printed form just as well in the spelling book, but this re-enforcement of writing the words is not there. There are some decided advantages of this method over the oral method:—

1. The word is brought more vividly before the mind in writing and the double impression is more lasting.

2. The main purpose of spelling is its use in writing, and the practice in writing trains the hand and the head to united accuracy in the spelling of the words.

3. Each pupil will be tested on all the words of the lesson.

4. It is a better test of the comparative ability of the members of the class in spelling, as all the pupils spell the same words.

5. It gives the pupil the opportunity to review all of the misspelled words and to fix the corrected form in the mind. This point should never be neglected by the teacher.

6. It keeps all of the pupils busy. It requires a teacher with strong personality and strong disciplinary power to hold the attention of each pupil in a large class in an oral spelling lesson.

7. To be a good speller, one's hand must be so trained to produce words that as soon as the word is thought, its written form will be produced without minute directions being given to the hand. This is sometimes called the hand-motor sense, and can be acquired only by much drill in written spelling.

During the first two years, the pupil will learn most of the new words during the recitation period. But the teacher must spare no pains to make the pupil self-helpful. The greatest danger of the word method in the teaching of reading is that pupils do not learn to pronounce strange words without help from some one else. The class should soon learn to pronounce and to spell the new words at the head of the lesson. There is some advantage in having all of the spelling done in full sentences at first. It keeps before the mind of the pupil all that has been learned in the reading. It prepares him at once to write what he speaks and makes learning to spell a rapid and intelligent process.

When the child has learned to spell a hundred or a hundred and fifty words, and to use them in his reading he may begin to spell isolated lists of words. These should for some time be arranged in lists similar in form and sound. It will enable the teacher to teach the sounds more readily, and to point out the differences of similar words, and the learning of the similar parts will serve to give the pupil a mastery of other similar words. For example, "cat," "bat," "hat," "mat," "fat," "sat," etc. When the child has gained power enough to learn new words without association with similar words, he may begin the use of the spelling book.

Throughout the school course the child should give particular attention to the words of its own vocabulary, to the words needed in expressing its own thoughts. Spelling, however, serves another purpose sometimes overlooked. It may increase a child's vocabulary. The use of a spelling book should never be condemned on account of the abuse of it. The teacher in using the spelling book should question pupils for the meaning of words. It is not necessary to give a dry dictionary definition. A proper use of the word in a sentence is much to be preferred. There is much time wasted in the lower grades by having pupils laboriously look up the meanings of words without getting any understanding of them. It is in every sense mechanical. The habit of consulting a dictionary is a good one, but it is not very profitable before the fifth or sixth grade. It is better to defer this until the child is mentally able to be benefited than to disgust it with so much unprofitable work. Talks about the meaning of the words in the lesson and having pupils give sentences containing the words and to recall where they have seen them in their reading, is an excellent thing to increase the pupil's vocabulary as well as to fasten the word in its correct form on the child's mind.

When the pupil has advanced far enough to prepare the lesson by himself, the teacher's task is principally in testing the preparation, in stimulating to study, and more important still, directing in the proper methods of study. There is so much time wasted in the study of spelling because pupils do not know how to study. The following suggestions for the study of the lesson may be found useful, whatever the method or device is used in the recitation:—

1. Have pupils carefully and thoughtfully study the lesson a few times, and then write the words. This is better than simply looking at the words, even if it be a pupil whom we may call eye-minded, because by using the muscles in making the consecutive letters it enforces the form on the memory.

2. The spelling of a word aloud is a good practice. To avoid the confusion which would result in this kind

of study in the school-room, have pupils study their spelling aloud at home, slowly and thoughtfully, a few times.

3. Have pupils form the habit of looking over the spelling lesson carefully and striking out the words they are sure they know how to spell. This will be a wonderful time saver, and will direct the pupil's energy where it is needed. So often pupils use as much energy on the words they are sure they can spell as upon the others, and the watchful teacher will help them to a better use of their time and energy.

4. Teach pupils to give their undivided attention to the work at hand. Perhaps there is no study in the school course where divided attention will accomplish less. It does not require the long-continued attention of algebra or geometry, but if in these subjects which appeal to the reason the attention is thrown off for a moment, the chain of reasoning may be taken up again; but in spelling the word is the unit, and if once the attention wavers, the whole effort is lost and must be repeated. In spelling, the repetition is apt to become mechanical and the pupil believes himself actually studying when he is not. Mind-wandering is to be deprecated at any time, but nowhere more than when an image of a word is to be stamped in the mind with integrity.

5. Arrange for pupils to study their spelling when their minds are not fatigued. An arbitrary memory study above all others requires all the vigor of the mind. The memory of these arbitrary facts, like the letters of a word, is the first power of the mind to feel the weariness of overwork, and far better rest the mind than try to apply it to such subjects and to acquire the sluggish habit of snoozing over them.

6. Keep a list of words misspelled, and review them frequently until pupils are thoroughly familiar with them.

RECREATIONS AND DEVICES.

1. In written spelling it is often a good plan to divide the class into two sections by numbering them "one," "two," "one," "two," "one," "two," etc., to the end of the class. Then pronounce the words alternately to the sections. While all in section "one" are writing their first word, the teacher may be pronouncing to section "two." It removes the temptation to copy a word from a pupil near by and will create rivalry between the sections.

2. A good device in oral spelling to train attention and to test the pupil's knowledge of when a word is spelled correctly is for the teacher to give no attention to a word misspelled but pronounce the next word to the next pupil. If this pupil has not observed the mistake of the one just above, he spells the word pronounced, and any subsequent pupil, however far down in the class, if he noted the mistake, may spell the word when his time to spell comes, and then pass above all who failed to observe the mistake.

3. A similar device is for the teacher often to pass a word correctly spelled to the next pupil just as if it had been misspelled. If the pupil has self-confidence enough to spell it the same way, all is right; but if he does not *know* how to spell it, the chances are he will spell it differently, and this is regarded as a word missed. This is an excellent device to cultivate self-confidence.

4. Have pupils stand and spell words beginning with the same letter, no word to be spelled more than once. If one fails to spell a word or spells a word which has been previously spelled, he must be seated. See who can stand longest.

5. Have pupils stand as above, and let the teacher pronounce a word to the first pupil. The second must take the last letter of the first word and make it the first letter of the second word, and so on, no word to be repeated. For example, the teacher gives the first pupil the word "house." The second pupil must spell a word beginning with "e," as the word "ever." Now the third pupil must spell a word beginning with "r," as "run." The fourth must spell a word beginning with "n," etc. Any pupil failing to spell a word or repeating a word spelled before must be seated.

6. A very successful device which is often used when pupils do not use a spelling book, is to select ten words each day, common words, but words often misspelled, and have them written correctly on the blackboard. The pupils study them as carefully as they would a lesson in a spelling book. When the time for the recitation in spelling comes, the words are erased from the board and then pronounced to the class, who write them. When all are written, the teacher calls miscellaneously for pupils to stand and spell the word as they have spelled it on their paper. Then some one is sent to the board to place the correct form on the board again. The teacher keeps a record of how many in the class missed each of the various words. From this list he knows what words to review. Words in review may be pronounced at any subsequent lesson

without placing on the board. If the words are carefully chosen by the teacher, some excellent results may be obtained.

7. The old method of choosing sides and then spelling down, having two pupils spelling at a time, often grows tiresome, especially if there are a few good spellers who monopolize the time. This may be obviated by having the two pupils who choose up to stand in opposite corners of the room. As each pupil is chosen, he takes his place in the order of choosing at the *right* of his captain. When the school is divided, all on one side are called No. 1 and all on the other side No. 2. Each pupil keeps his number, regardless of change, until the end of the spelling. Two trusty pupils, one from each side, are chosen to keep tally. The first word is given to the captain of side No. 1, and when the word is spelled the captain walks across the floor to the foot of No. 2, and as he crosses the floor, he calls his number distinctly. The two persons keeping tally register this by giving side No. 1 one mark or tally. The teacher pronounces in regular order down side No. 1. If any words are misspelled pupils pass above just as they would in a spelling class. When all on side No. 1 have spelled, the teacher passes to the captain of No. 2. When he spells, he crosses over to the foot of side No. 1, calling distinctly his number, and the secretaries credit side No. 2 with a tally, and the spelling continues down side No. 2. In the same way the one who now stands head in side No. 1, after spelling his word, calls his number and takes his place at the foot of No. 2. The process is continued at pleasure. In a little while by pupils missing words the sides will become mixed, but each pupil keeps his original number, and when he

crosses to the other side of the room, calls out this number, and his side is given a credit. It will be seen that the best spellers will cross from one side of the room to the other oftener than the poor spellers, thus giving their side more credits. The side which has most credits is considered victorious. It has two advantages over the old plan:—

(1) It keeps all the pupils busy, and gives the smallest pupils and the poorer spellers the same drill in spelling as the largest pupils and the best spellers.

(2) Two or more persons may pronounce at the same time, keeping a little distance apart, and thus get more drill in the same length of time.

8. An interesting game for a small class of small pupils is " Pussy Wants a Corner." One pupil is pussy, who stands off to one side. Words are pronounced to the class. When a word is missed, " pussy " has a chance to spell it. If the word is correctly spelled, " pussy " takes her place in the class, and the pupil who missed becomes " pussy," and so on.

9. A useful plan in written spelling is to have the words written in one column. Opposite each word in the next column may be the part of speech, in another a synonym, and in a fourth column a sentence containing the word.

10. To cultivate attention, give each pupil a number, then pronounce a word and call the number of the pupil who is to spell it. This miscellaneous calling to spell will keep each one on the alert to understand the word and to be ready to spell should you call the number. Numbers are more readily called than names, and require closer attention on the part of the pupil.

XXI. ARITHMETIC

Arithmetic has long held sway in the popular mind as being the subject of greatest importance in the common-school course. It is looked upon as being of great practical value in life, and essential to a business career. It is not an uncommon statement to hear a father say he wants his boy to learn arithmetic whether he knows anything else or not. The one great essential in the early schoolmaster was that he be able to do the sums. It mattered little whether he knew anything else or not. To him all manner of arithmetic puzzles were referred, and if he could not "do" them, he was regarded as "no good."

The preference which arithmetic won in this early day may be waning, but it is far from being lost. New subjects have knocked loud and fast at the door of our early school curriculum, and a number have been admitted, but arithmetic still holds and will continue to hold a good share of attention. There is no doubt, however, that the mere practical or commercial value of arithmetic has been overestimated and is at present overestimated. The man in business uses comparatively little arithmetic compared with what the uninitiated think he uses. He rarely has a problem in complex fractions. His banker counts the interest on his note, not by the old-fashioned aliquot parts or the hundred per cent. method, but by the help of a book where all the calculations are made and he has but to add the results. The long columns of figures to be added are now added by a machine made for the purpose, and the results are absolutely correct. Thus much of the early arithmetic which we learned, thinking we would use it constantly when we were men, is now largely obsolete. Few of us ever use partial payments, compound interest, allegation, cube root, and a number of other subjects treated in almost every complete arithmetic, and a majority of our business men, and many of our most successful business men, would find it hard to solve a large number of such problems. It is evident to any one who thinks that the commercial value of arithmetic is greatly overestimated in the popular mind.

THE CULTURE VALUE.

Arithmetic and the other branches of mathematics have been for centuries valued for the discipline they afford. Probably no study in the school course develops the mind in so many different ways. Not a faculty but is exercised in studying arithmetic if it is studied properly, and it may be adapted to the mind at any stage of its growth. Arithmetic gives some culture to memory and to perception, although at first we might overlook the fact. It requires complete mental concentration, and thus offers a high form of culture to the attention. It gives, in the advanced work, constant exercise to the judgment, and trains it to the closest discriminations. Then every derived equation is a logical deduction from those preceding, and is reached by continuous reasoning, developing the reasoning powers. Some of its truths are axiomatic, and are comprehended as an act of intuition. Many parts require an exercise of the imagination, and the definitions require the nicest kind of discrimination between ideas and their expression. It is true its conclusions are definite, specific, and capable of verification, and from this cause does not train in probable reasoning as in questions of social, political, and economic problems. It gives, however, more than any other school study, mental power, logical habits of thought, and training in persistency. Our texts on arithmetic may need pruning; some subjects should be omitted and placed in the appendix, some of the puzzles assigned to algebra where they belong; but unless many of the newer subjects in our curriculum can show culture value of the highest type, we should not be too radical in our changes in arithmetic.

Too much time is spent in arithmetic for the results achieved. This is due to several causes:—

1. There is lack of intensity in the study. Children are allowed to snooze over their work, to acquire habits of mental indolence, to let their thoughts go wool-gathering, to kill time instead of learning clear, sharp business methods.

2. There is too much formalism. We hold to form and neglect content. We give more attention to the husks than to the corn, to the exterior form than to the thought back of it. The hundred per cent. method in percentage, excellent as it is, may be reduced to little else than a set form. I remember well one of my teachers who was such a stickler for form. He would receive nothing unless it were arranged according to a specific model. I recall one problem in compound interest placed on the board in which there were forty-four equations. Not an equation short of that would have been accepted, and the class were gulled into the notion that we were studying arithmetic. A study of the history of arithmetic shows the old method of number work in which long division was made longer still by being arranged in

fantastic shapes resembling ships, etc. What lessons the history of pedagogy might teach to the thoughtful.

3. Pupils are not trained to read the problem and to grasp the conditions. Fifteen years' experience with advanced classes leads to the conclusion that much of the trouble comes from lack of power to read. It is their English rather than their arithmetic which is at fault.

4. Pupils are not trained to accuracy in the four fundamental processes. They cannot add, subtract, multiply, and divide. It is said the superior work in arithmetic in the German schools is due to the long and excellent drill given in the fundamental processes. Then, when the pupils come to the advanced work, they are not handicapped by inaccuracies on the mechanical side.

5. Arithmetic is taught in scraps and fragments instead of as one logical whole. Each new subject is taught as something separate and apart from all the others. Pupils are pushed into the new subject without taking an inventory of what they already know which will apply to the subject. There are comparatively few things to learn in any of the subjects in arithmetic which are entirely new, but the study of each subject should be preceded by a review of what is already known and what must be used again in the new subject.

6. Mental arithmetic is neglected. There is nothing better than mental arithmetic to pave the way for advanced work in written arithmetic. The teacher states the problem orally, the pupil states the conditions, and then gives a good logical solution and the conclusion,—what can be better training for advanced arithmetic? A neglect of mental arithmetic leads to poor interpretation of the condition of the problems of written arithmetic.

AIMS IN TEACHING ARITHMETIC.

Good teaching of arithmetic should accomplish these ends, and in the order named:—

1. *Accuracy.* This should include accuracy in result, accuracy in reasoning, and accuracy in expression. Mathematics is an exact science. The arithmetic in after life which is not exact to the unit is of poor quality. We accept as high-grade work in class a solution of nine problems out of ten. It is no wonder boys thus trained are found short when tested by the business man's standard. How long would the banker hold his place if one out of ten of his results was wrong? Suppose the clerk makes but seventy-five per cent. in his business calculations, would he pass? Yet that would give a passing grade to most pupils in school, even if the testing were only upon results alone. But there should be accuracy in reasoning as well. Pupils must be trained to give the reason for their operations. We are content if pupils call numerical results, but it is far better training for pupils to tell first what the result will be by naming it, and then later give its numerical value. If you want to find the value of a field 80 rds. long and 40 rds. wide at $10.00 per acre, have pupils explain that they multiply the length of the field by the breadth, which will give its area in square rods, or 3200 sq. rds. Then there are 160 sq. rds. in an acre, and there will be as many acres in the field as 160 is contained times in 3200, which is 20. If one acre costs $10.00, twenty acres will cost twenty times $10.00, or $200.00. Therefore the value of a field 80 rds. long and 40 rds. wide at $10.00 per acre is $200.00.

So many of our teachers are content with the mere manipulations of figures. The emphatic part of the above is that *when you multiply the length of the field by the width it will give you the area of the field,* while too often we emphasize the numerical result 3200 until the pupil loses sight of the fact that it is the area of the field. The name of the result and its numerical value cannot be divorced without detriment to the child. Accuracy in expression must be insisted upon. It is not an uncommon thing to see two equations joined in one, as, $6 \times 5 = 30 + 7$. Now six times five does not equal thirty-seven. Numerous inaccuracies in expression, indicative too often of looseness in thinking, creep in, and we must be on our guard to prevent them. The first aim of our work in arithmetic, then, should be accuracy.

2. *Rapidity.* This is the age of lightning speed. Time is precious. Speed is valuable. The labored writing is out of date, and the man who is not quick as well as accurate in arithmetical calculations is badly handicapped in business, and the teaching that does not train in quickness as well as in accuracy is not the best teaching of arithmetic.

3. *Neatness.* This is not as important as the other two, but it is far too important to be overlooked. Pupils from the very first should be trained to arrange their work so that others may be able to read it easily and understand it readily. Good taste may be cultivated and at the same time originality, and this is worth much in many ways in after life. The solution on the blackboard that cannot be followed by the stranger who steps into the room, provided he understands arithmetic, is lacking in one very valuable feature. Logical thinking is apt to lead to logical arrangement of the work, and on the

other hand, training in careful arrangement of work will help to logical thinking.

THINGS TO EMPHASIZE.

Before taking up any specific parts of arithmetic for discussion, there are some things to point out which belong to the subject as a whole and which lie at the basis of good teaching of arithmetic:—

1. See that pupils get correct ideas of number. This may be done by the use of objects and careful association of the idea of numbers with objects in the early stages of number work. Too often number is confused with the symbol of number. Children think of figures instead of numbers. The symbol 4 is too often to them the number four. Five dollars to them is the figure 5 with the dollar mark to the left. Three feet is the figure 3 with ft. written to the right. After they have been taught to look back of the symbol to the thing symbolized, it is necessary for them to get clear conceptions of standards of length, capacity, weight, etc. They should learn to measure the foot, the yard, and the inch by the eye as well as by the yard-stick. Note what wild estimates even high school pupils make in guessing distance, largely because they have never had a clear conception of the standard of length in mind. Many children in the grammar grades have little conception of a quart or a gallon or a bushel. Institute work has revealed to me that a large per cent. of the teachers do not know that there is a difference in capacity between a dry and a liquid quart, or a dry and a liquid pint, to say nothing of having a clear conception of the size of them.

2. Teach ideas instead of words. Teach pupils to go back of symbols to the thought. Teach that fractions

are parts of things, and that they are expressed by two numbers, one above the other, a short horizontal line between. Do not confuse the fraction with its expression. Decimals are fractions whose indicated denominator is ten or some power of ten. The difference between common fractions and decimals is in the way they are expressed. Principles should precede rules, and the pupils should understand the terms. I do not advocate that pupils should never commit the language of the book, but the teacher must make sure that they understand the language first.

3. Each new subject should be correlated with the subjects that have preceded it. See that pupils get the relation of facts and new principles to those they have already learned. Each new term should be explained and understood, and the old knowledge reviewed and made ready for use in the new subject. It is the constant recalling and re-enforcing of the old knowledge and its use in its logical connection which makes it effective and gives mental power. When the class study decimals they must be able to readily recall and use any principles of common fractions they have already learned. When they study percentage, they have very little new to learn if they are apt in the application of the principles of decimals. If they learn percentage properly, there is little else to learn in interest.

4. Insist upon accuracy in the fundamental operations of addition, subtraction, multiplication, and division. These subjects do not get enough attention. Pupils by long, laborious, and continual effort solve the problems given in their text-books in these subjects. If it requires a third or a tenth trial it matters not, just so they get the answer. This kind of work will not suffice. They

need drill — quick, spirited, lively drill — until their results may be depended upon. We lose much time by rushing pupils on into the more intricate processes and problems requiring close discrimination and reason before the reasoning powers are capable of development. This time should be spent in perfecting them in the more mechanical processes and making them accurate, and the time lost here will be regained tenfold by quickness in the solution of problems later. Percentage with all of its various applications should be taught to a class in one month if they were properly prepared. Nine tenths of the trouble and time is in correcting mistakes in the fundamental operations, and not in the principles and applications peculiar to percentage. Take that subject, the bug-bear to pupils and teacher alike, partial payments. More than three fourths of the time lost upon it is caused not by the number and difficulty of its principles, but in correcting mistakes in the fundamental operations. The pupil makes a slight mistake in multiplying near the first of the problem, or a mistake in subtracting the dates, and a long solution must be performed again. Confused, tired, disgusted perhaps, with the whole thing, he thinks partial payments are hard, and "he knows nothing about it," and the teacher agrees with him most heartily. The pupil concludes it is partial payments that is hard, when the fact is, it is his addition, subtraction, and multiplication which are at fault.

Let me insist that teachers make their pupils accurate in the fundamental operations early. Drill, drill, give credit for getting the answer the first time. Do not hurry. The fourth year class, accurate and quick and well drilled in the fundamental operations at the end of the year, will complete the practical arithmetic well in three more years, with the eighth year to review the subject as a whole. Our pupils begin number work as a study too young, and are trained to inaccuracy and indolent habits. The child who begins number work at eight, when ten years old will often surpass the child who began the work at six, and spent two years learning indolent habits in dealing with numbers.

5. Before the class takes up a new subject, let the teacher arrange definitely the definitions and principles and new facts which are essential to the understanding of the new subject. With these definitely in mind and with the principles already learned by the pupils clearly before the teacher, a little planning on the teacher's part will make it possible for him to get good results with the least waste of time.

PARTICULAR SUBJECTS DISCUSSED.

Oral Number.—In the last few years there has been much discussion of methods of teaching primary number, the Grube, the Ratio, and other methods being quite prominent. These can be found discussed in school journals and books prepared especially on number work. An enthusiastic teacher who believes in his method, and has an earnest desire to get results with the children, will succeed with either of the various methods. The Grube method was very popular a few years ago, and still has many wise and skilful adherents. Its basis of instruction is the individual number instead of the operation, and from the start, the four fundamental processes are taught together. In teaching any number, all possible operations within the limits of the number are made.

As stated above, the method used is of less importance than a determination on the teacher's part to get results. Do not, in country schools, disgust boys and girls with number work too simple. Few country boys of the rough-and-tumble kind, start to school without knowing how to count. They know they must give old Charley five ears of corn, the work horses seven, and the mules three each feed. They know how many pigs each sow has, and how many eggs old Speck sat on, how many chickens she hatched, and how many spoiled eggs they got to take up in the orchard to break. The country boy has argued the question with his younger sister, that there being five eggs to break, he should break three of them and she two, and the argument was so convincing that it wound up by his getting to throw four instead of three. That at least was my experience as a country boy. I do not remember the time when I could not make any combination of numbers as high as ten. I went through Ray's old Practical Arithmetic the winter I was ten years old, including the one hundred miscellaneous problems and the metric system at the back of the book. It never occurred to me then, or now, that I was above the average boy in arithmetical ability.

Addition.—A decimal system of numbers is a system in which ten is the radix. Ones are grouped into tens; tens into tens of tens or hundreds, etc. Explain and illustrate this grouping by bundles of splints.

Explain the sign of addition and its meaning. Like numbers only can be added.

Teach the addition table thoroughly. There are but forty-five combinations possible. These are:—

$1 + 1 = 2$
$1 + 2 = 3$
$1 + 3 = 4$
$1 + 4 = 5$
$1 + 5 = 6$

$2 + 2 = 4$
$2 + 3 = 5$
$2 + 4 = 6$
$2 + 5 = 7$
$2 + 6 = 8$

$3 + 3 = 6$
$3 + 4 = 7$
$3 + 5 = 8$
$3 + 6 = 9$
$3 + 7 = 10$

$1 + 6 = 7$
$1 + 7 = 8$
$1 + 8 = 9$
$1 + 9 = 10$

$2 + 7 = 9$
$2 + 8 = 10$
$2 + 9 = 11$

$3 + 8 = 11$
$3 + 9 = 12$

$4 + 4 = 8$
$4 + 5 = 9$
$4 + 6 = 10$
$4 + 7 = 11$
$4 + 8 = 12$
$4 + 9 = 13$

$5 + 5 = 10$
$5 + 6 = 11$
$5 + 7 = 12$
$5 + 8 = 13$
$5 + 9 = 14$

$6 + 6 = 12$
$6 + 7 = 13$
$6 + 8 = 14$
$6 + 9 = 15$

$7 + 7 = 14$
$7 + 8 = 15$
$7 + 9 = 16$

$8 + 8 = 16$
$8 + 9 = 17$

$9 + 9 = 18$

Vary these in every possible way. Drill until the combinations are firmly and indelibly made in the mind. Teach pupils to add by endings. Show that any number added to 9 gives the right-hand figure one less than the number added to it. Thus 9 and 8 give the right hand figure a 7, etc. Make all possible combinations with 9. Show that any number added to 8 gives the right-hand figure two less than the number added. Thus 5 and 8 give the right hand figure 3. Make all possible combinations. Continue with the other numbers.

Give a number of problems for seat or home work, and for oral practice in the recitation. After the endings are learned, hold to accurate, rapid work. Take the following:—

$$\begin{array}{r} 324 \\ 483 \\ 878 \\ 967 \\ 745 \\ \hline \end{array}$$

Teach pupils to add, simply calling 12, 20, 23, 27, as they add the first column. Leave out all and's and are's. Then as the second column is added they should point, saying rapidly, 6, 12, 19, 27, 29. Then in the third 9, 18 26, 30, 33.

Lead them to answer the following questions: How were the above numbers written for addition? Why? Which column was added first? Why? When the sum of any column was more than ten, what was done? Why? When the answers to these questions are clear to them, let them formulate the rule for addition.

What must be true of numbers before they can be combined into one sum? What is the denomination of the sum?

Teach pupils the tests of accuracy:—

1. Add the columns in reverse order.

2. Separate the problems into two or more problems and unite the results.

3. The excess of 9's in the sum of the digits in the addends must equal the excess of 9's in the sum of the digits.

Subtraction.—Teach the sign of subtraction and its meaning. Arrange the subtraction table and drill thoroughly in the eighty-one primary problems. Neither rapidity nor accuracy can be possible until the difference between the following pairs of numbers can be given readily: —

2 — 1

3 — 1
3 — 2

4 — 1
4 — 2
4 — 3

5 — 1
5 — 2
5 — 3
5 — 4

6 — 1
6 — 2
6 — 3
6 — 4
6 — 5

7 — 1
7 — 2
7 — 3
7 — 4
7 — 5
7 — 6

8 — 1
8 — 2
8 — 3
8 — 4
8 — 5
8 — 6
8 — 7
9 — 1
9 — 2
9 — 3
9 — 4
9 — 5
9 — 6
9 — 7
9 — 8
10 — 1
10 — 2
10 — 3
10 — 4
10 — 5
10 — 6
10 — 7
10 — 8
10 — 9
11 — 2
11 — 3
11 — 4
11 — 5
11 — 6
11 — 7
11 — 8
11 — 9
11 — 10
12 — 3
12 — 4
12 — 5
12 — 6
12 — 7
12 — 8
12 — 9
12 — 10
12 — 11
13 — 4
13 — 5
13 — 6
13 — 7
13 — 8
13 — 9

14 — 5
14 — 6
14 — 7
14 — 8
14 — 9
15 — 6
15 — 7
15 — 8
15 — 9
16 — 7
16 — 8
16 — 9
17 — 8
17 — 9
18 — 9

There are two methods of "borrowing." One reduces the digits in the minuend, and the other increases the digits in the subtrahend. It matters not which the teacher uses. In a beginning class teach only one method. In advanced classes let pupils use either. Any arithmetic will give an explanation. For illustration, from 732 take 564. (1) Now since the first term of the minuend is less than the same term in the subtrahend, one of the terms of the subtrahend may be reduced to ones and this added to the first term. Ten ones plus 2 equals 12 ones. 12 minus 4 equals 8. Now apply the same process in the other columns.

Multiplication.— Show that multiplication is a short method of finding the sum of two or more equal numbers.

Explain the sign of multiplication and the two ways of reading it. When the multiplier comes first, it is read "times;" when the multiplier comes last, it is read "multiplied by." See that pupils understand the terms multiplicand, multiplier, and product, and show them that the multiplicand may be an abstract or a concrete number, that the multiplier is always an abstract number, and the product always like the multiplicand. See that pupils understand how the multiplication table may be derived, and that they have it thoroughly committed. Seeing how the rule is derived is good, but to attempt to teach multiplication without having pupils commit it to memory is a foolish waste of time.

Teach pupils to understand why we write the partial products as we do. Thus if we are multiplying 524 by 223,—

(1) We are to unite two hundred twenty-three 524's First we unite three 524's, then twenty 524's, then two hundred 524's, and then write the several products.

(2) $3 \times 524 = 1572$ ones.
(3) $20 \times 524 = 2 \times 10 \times 524$ ones.
(4) $200 \times 524 = 2 \times 10 \times 10 \times 524$ ones.

These partial products then united will give the complete product.

Teach the following tests for accuracy: —

1. Use the multiplicand for multiplier.

2. Divide the product by either the multiplicand or the multiplier, the quotient must be the other.

Division.— Teach the division signs and their use. If multiplication has been properly taught, division will give little trouble. Teach short division thoroughly before long division. If long division is taught first, children are apt to neglect short division, and lose much valuable time in solving problems by long division which should be solved by short. When long division is taken up, use problems which could be readily solved by short division until pupils have mastered the mechanical arrangement. Do not lose patience. Long division was the hardest subject in arithmetic for me, and it was due to the neglect of the teacher to show me how to arrange the mere mechanical part of the work. Give drill work until pupils are quick and accurate.

Law of the Signs.— The class having now completed the four fundamental processes, teach the law of the signs. Authors are not quite a unit on these, but the following seem to be the best, and will perhaps soon be accepted by all:—

1. The signs of addition and subtraction take precedence over the signs of multiplication and division.

2. The operations of multiplication and division should be performed in the order of their occurrence.

3. If there is a variation from this, it should be indicated by one of the signs of aggregation. For illustration: —

$$5+3\times6\div2+8-2\times2=18$$
$$5+3\times6\div(2+8)-2\times2=2.8$$

Compound Numbers.— Teach pupils the essential difference between simple and compound numbers. In compound numbers the scale varies. In simple numbers the scale is uniform. The only difference between addition of simple numbers and addition of compound numbers is that in simple numbers ten units of each lower order make one of the next higher, while in addition of compound numbers the scale varies with the table and with the denomination. Sometimes three units of a lower order make one of the next higher, sometimes forty and sometimes seventeen hundred twenty-eight.

See that in the beginning pupils understand thoroughly the processes of reduction descending and reduction ascending. When this is well taught with the first few tables, there is little else to learn but the new tables.

Group the tables, preparing an outline to fit your text-book, and see that pupils get a bird's-eye view of the subject. Time is wasted by a heterogeneous mixing of tables until pupils are confused. Some time spent in organizing and getting well into the pupils' minds the use of the different tables, is a great saving. When pupils know the tables and understand clearly the difference between the fundamental operations with simple numbers and compound, then addition, subtraction, multiplication, and division of compound numbers will give them no trouble.

Longitude and Time.— This is one of the little bugbears of arithmetic. In a teachers' institute requests for explanations of difficult subjects are seldom asked for without this being in the list. It is sure to be requested some time during the week, if teachers are asked to suggest subjects for discussion. There is no reason why teachers should find longitude and time hard to teach. Let these points be made clear, and let the teacher illustrate with a globe.

1. 360° make a circle.

2. The earth turns on its axis once in twenty-four hours, and turns from west toward the east.

3. Thus in one hour it will turn $\frac{1}{24}$ of 360°, or

15°. From this we get the relation between time and longitude as follows: —

1 hr. = 15°
1 min. = 15′
1 sec. = 15″
1° = $\frac{1}{15}$ hr.
1′ = $\frac{1}{15}$ min.
1″ = $\frac{1}{15}$ sec.

4. The earth turns from west toward the east, and as the time at any place is based upon the relative position of the sun to the meridian of that place, all points east of us until we pass half round the earth will have later time, and all points west will have earlier. Hence if we have given the time at one point and required the time at a point east of it, we add the difference in time. If west, we subtract the difference in time.

5. The difficulty comes from thoughtlessness of pupils. They fail to station themselves in imagination at the point having the given time, and then ask in which direction is the time required. Thus when it is school time, or 9 o'clock A. M., in Chicago, what is the time in Boston? Let them stand in imagination in Chicago. Then as Boston lies east of them, they will add the difference in time to 9 o'clock to get the time in Boston.

6. Another difficulty comes from finding the difference in longitude, when, for example, one is 20° E. and the other 40° W., or when one is 170° E. and the other 160° W., and so on. Five minutes' explanation with a globe or ball should make this clear.

7. The International Date Line causes some confusion, especially when the day of the week and the month are required. This, too, can be made clear by the use of the globe.

Decimals.— Pupils should have a clear and accurate understanding of decimals because of their importance in operations with percentage. After pupils understand the difference between common fractions and decimals, it requires only a few new facts and some thoughtful drill to make them proficient in decimals. These simple but specific directions, well mastered, will help: —

1. Pupils should have at their tongue's end the number of decimal *places* up to millionths. That is, they must know that tenths has one figure, hundredths two, thousandths three, ten-thousandths four, hundred-thousandths five, millionths six. No sooner is ten thousandths mentioned than the child should know that there are four figures in it. The mind should respond to this as quickly and as accurately as the hand does to making the figure as the number is called.

2. They should use the word *and* only between whole numbers and the decimal. Thus 325.025 is read three hundred twenty-five and twenty-five thousandths.

3. The last word in the statement names the decimal. This is very important. Take these two statements: —

(1) Write two hundred thousandths.

(2) Write two hundred-thousandths.

The first is written .200, for the name of the decimal is thousandths, and there are two hundred of them. The second is written .00002, for the name of the decimal is hundred-thousandths, and there are two of them. The only difference in the statements is the compound word indicated by the hyphen, making the first thousandths and the second hundred-thousandths. With these three things thoroughly understood, the writing of decimals becomes easy.

The operations with decimals are so similar to those of simple numbers that careful planning on the part of the teacher will make them easily taught.

Percentage.— Make clear the terms *base, rate,* and *percentage.* Explain clearly the first formula, $B \times R = P$.

From this fundamental formula develop all the others. If pupils have been properly taught, they need only to remember the fundamental formulas in percentage, and from these they may derive the others.

Make an outline of the applications of percentage to suit the text-book you are using. This will give your pupils a view of the subject as a whole. Teach them to distinguish carefully what is given and what is required in each case. Then teach them to apply the proper formula for finding the missing term. It is well to have pupils state clearly and definitely what is given and what is required. For example, in the problem: —

" In a flock of 250 sheep 25 of them died. What per cent. of them died? "

Have pupils make out a statement as follows: —

$B=250.$
$R=?$
$P=25.$
Formula: $P \div B = R.$

After they see clearly what is given and what is required, let them perform the operation. Remember that until your class can give a clear, definite statement of what is given and what is required, all work is haphazard. Too much time is wasted in figuring without knowing just what is wanted. It is blind effort in the hope of securing the answer. Good teaching makes sure that the pupil knows just what he is seeking in the problem.

After percentage with its many applications is taught, there remain but few other subjects properly belonging to arithmetic. Involution and evolution should be thoroughly taught. In beginning evolution do not waste valuable time in teaching the reason for the rule. Pupils must be able to find the square and the cube root before much advancement can be made in algebra or higher arithmetic. Teach the pupils thoroughly the mechanical process, and make them quick and accurate in finding the square or cube root of numbers, telling them that the explanation of these rules belongs to geometry and algebra. If you have arithmetical geniuses in the class who want to know the reason for the rules, explain them, but with many of the class a month's time would not make the reason any clearer, because it is beyond their mathematical comprehension, while in two weeks' time they should be fairly accurate in the process.

Let me insist that teachers have pupils learn the squares of all numbers up to twenty-five and the cubes up to ten. They should know these as thoroughly as they know the multiplication table, being able to name the squares or cubes as rapidly as the teacher calls the numbers, or to name the roots as the squares and cubes are given. To teach these will require but little time, but it will be a time saver ever afterward to the pupil. In solving a problem in square root, if the pupil cannot tell at a glance the largest square in the left-hand period, he is at a great disadvantage. In fact, he can secure the first figure of the root only by trial or guess work. In cube root it is just as necessary to see at a glance the largest cube in the left-hand period. To fail or to neglect to see that the pupils know thoroughly these squares and cubes is unpardonable in the teacher of these subjects.

When the pupils see the number 589, they should know that the largest square in that number is 576, and that the root of the square is 24. When they see the number 400, they should know instantly that the greatest cube contained in it is 343, and that the root of this cube is 7. With such knowledge they have the first figure of the root instantly, and then with a little drill on the mechanical arrangement the other figures are quickly and accurately found.

Mensuration and its various applications should be thoroughly taught. No part of arithmetic is more practical in after life, and at the same time nothing gives more culture. So many pupils leave school before studying geometry, and mensuration is so important that its use in arithmetic is justifiable.

Pupils properly prepared can in a few weeks get a practical knowledge of mensuration. Almost every rule can be clearly explained and illustrated by the thorough teacher and brought into the comprehension of the class.

A clear, definite outline made to embrace your author's treatment of the subject will be very helpful. This may be complete enough to include the different rules and principles of each subject. The pupils should have this outline thoroughly in mind, and be able to reproduce it from memory.

No subject in arithmetic gives better results than mensuration when properly taught. If the teacher is alive to its interesting features, full of his subject, and gives sufficient well-chosen illustrations and supplementary problems, the pupils will be enthusiastic over the work. If they are not interested, it is almost invariably the fault of the teacher.

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XXII. GEOGRAPHY

The word geography is of Greek origin, and means literally a description of the earth. It is claimed with much truth that geography is not so much a science within itself as a collection of facts from various sciences. Chemistry, physics, geology, botany, and zoology each and all contribute to what is commonly called geography. Geography is frequently divided into mathematical, political, and physical. But this division will not be carefully followed here.

Of all the studies of the school course geography and history are the most liberalizing and humanizing. The man ignorant of geography must be of very minor importance in the world; while, on the other hand, a man familiar with geography must, in a sense, be educated. The great inventions of the last century have, in a large sense, annihilated space. New York and San Francisco are nearer together to-day than New York and Philadelphia were in Washington's time. The study of geography, through the cultivation of the imagination and the other faculties, annihilates space to the pupil. It brings the peoples of the world, with their manners and customs, their religion and their life, to the pupil, and is a wonderful liberalizing force. Narrow-mindedness is largely another name for ignorance. Men who have seen much of the world, and especially if they have come in contact with the life of the people, grow tolerant in their opinions, and have more sympathy and interest in the community as a whole. The right study of geography will be to the boy or girl what traveling is to the man or woman.

What should the intelligent man know of geography? This should determine the ultimate object of teaching it. In geography, as in other studies, if there is a definite object in view, methods and devices will be readily found. The intelligent man wants to know something of the manners and customs, the religion and races, the standing and civilization of the people of the world. He wants also to understand the phenomena of nature and the physical features and possibilities of the continents. This explains many of the peculiarities of nations and races, the soil and the climate, and the natural conditions of the continents. Not only this, he sees the gateways of the world, and the importance of location, and the possibilities of the future. He sees also the influence of individuals, as well as the industry and thrift of the people as a class, and knows the transforming influence of these upon the locality or the country. This being among the things which the intelligent man should know about geography, the study of the subject should aim at these results.

It must never be forgotten, however, that the child cannot think the man's thoughts. He is gathering and grouping and storing facts from which general deductions and intelligent conclusions will afterward be formed. The study of geography, then, like any other subject, must be adapted to the mental capacity of the pupil.

There are two general methods in the study of geography, the analytic and the synthetic. The combining of these methods would perhaps be the most intelligent teaching. Those advocates who use the analytic method claim for it the following advantages: —

1. It enables the teacher to use a globe from the very first.

2. It gives a correct view of the size, relation, and direction of countries.

3. It enables the teacher to explain the causes of day and night, and many other natural phenomena, early in the school course.

4. It follows the law so generally accepted as final that we should go from the whole to its parts.

Perhaps neither of these four contains the whole truth.

The advocates of the synthetic method claim for its advantages: —

1. That the teacher can illustrate from familiar objects, and thus create more interest.

2. That he follows the pedagogical law of proceeding from the known to the related unknown.

3. That it teaches pupils the most important geography of their own section and State before the study of remote places and people.

4. That it gives the child a definite meaning of geographical terms from the very first.

In the analytic method the teacher begins with the world as a whole, its size, shape, motion, etc. Then comes the division into hemispheres, zones, and later into continents, countries, states, counties, communities, and localities. In the synthetic method the child begins with the home and farm and school-yard, or the city, and goes to the township or district and community, the State, the country, the continent, the earth as a whole. The better method is to begin with the synthetic, teaching pupils something of the school-house and grounds, and later the township, county, and State. It must be remembered, however, that the average child, after you pass his immediate neighborhood, will grasp the thought of the earth as a whole almost as readily as of the country or continent. To a child "away up in the country" is just as incomprehensible as away out in California or away over in Europe.

In beginning with the school-house and grounds, pupils may be led to determine directions and distance, to draw maps of these familiar objects, and to locate direction and distance on maps. After the child is thoroughly familiar with these things pertaining to his immediate surroundings, it is an easy transition to other surroundings. They come in contact with geography first from nature rather than from books. Agassiz, the great teacher of natural science and all that pertains to nature, says in regard to teaching geography, "Let us not at first resort to books, but let us take the class into the fields, and point out the hills and valleys, rivers and creeks, and let the pupils learn out of doors the points of the compass. Then having shown them these things, let them compare the representations with the realities, and the maps will have a meaning to them. When I was in the college of Neuchatel I desired to introduce such a method of teaching geography. I was told it could not be done, and my request to be allowed to instruct the youngest children in the institution was refused. I resorted to another means, and took my own children, my oldest, a boy of six years, and my girls, four and a half and two and a half years old, and invited the children of my neighbors. Some came upon the arms of their mothers, others could walk without assistance. These children I took upon the hill above the city, and there showed the magnificent peaks of the Alps and told them the names of these mountains and the beautiful lakes opposite. I then showed them the same things on a raised map, and they immediately recognized the locality, and were soon able to do the same thing on an ordinary map. From that day geography was no longer a dry study, but a desirable part of their education."

This paragraph from Agassiz is full of suggestion to the thoughtful teacher.

Maps should mean more to children than mere bits of colored paper. The black line representing the river must not be a black line simply, but the child in his imagination must see the river "seize the hills in its hands, and drag them down to the ocean." The black dots representing cities must in the child's mind be built into thriving cities with the push and noise of busy life. Mountains should be something more than wave-like lines across the page. Rocky crags, deep ravines, snow-capped peaks with their wonderful, awe-inspiring scenes, must be so pictured that the child sees them in his imagination.

Begin geography with the child's immediate surroundings, and constantly appeal to his imaginative power. Do not forget also that geography is closely linked with reading, history, literature, and language. Encourage the reading of books of travel, stories of foreign people, descriptions of wonderful natural objects, and historical events. Use to advantage numerous pictures, drawings, modelings, and moldings.

Take your class on imaginative journeys, visit historic spots, go on summer outings and exploring expeditions, have the class describe the changing scenes and wonderful things which may be seen and heard on such explorations. Much interest will be added to the study, and geography become a living subject.

Do not forget the study of physical geography, even in the lower grades. It may not be called physical geography always. The cause of rain fall, deserts, winds, tides, day and night, changes of the moon and the seasons, may be studied, and although they cannot be clearly explained to the mind of the child, something of their causes may be given, and this will incite interest and further study later. Also the modifications of climate. Early in the study of geography direct the pupil's attention to the importance of commerce and commercial centers in the building and development of cities. Note also how the life of the people may be modified by the climate and soil. Minnesota with her waving fields of wheat, Mississippi with her fields of cotton, neither will ever compete with the other in these two productions. But the climate makes a great difference in the customs and habits, the clothing and to a certain extent the conduct, of the people. Soil and climate lie at the very basis of correct interpretation of institutions.

After pupils grow familiar with their text-book on geography, nothing is better than a topical outline for the study of a state or a country. It helps the pupils to classify what should be known. The teacher may arrange the outline to suit his own judgment. The pupils are then to gather the information from any source to which they have access. The outline given below may be modified to meet the needs of the class, but each member should have it neatly copied and before him in the preparation of the lesson as well as at the recitation:—

OUTLINE FOR A COUNTRY OR CONTINENT.

- I. Location.
  - 1. Latitude.
  - 2. Longitude.
  - 3. With reference to other countries or bodies of land and water.
- II. Size.
  - 1. Area.
  - 2. Compared with your own State.
  - 3. Length and breadth.
- III. Outline.
  - 1. Indentation.
    - (1) Seas.
    - (2) Gulfs.
    - (3) Bays.
    - (4) Estuaries.
    - (5) Deltas.
  - 2. Projections.
    - (1) Capes.
    - (2) Peninsulas.
  - 3. Connections.
    - (1) Isthmuses.
    - (2) Straits.
  - 4. Islands.
    - (1) Continental.
    - (2) Groups.
- IV. Natural Features.
  - 1. Land.
    - (1) Mountains.
      - *a.* Ranges.
      - *b.* Peaks.
    - (2) Plateaus.

    - (3) Plains and Valleys.
    - (4) Watersheds.
  - 2. Water.
    - (1) Rivers.
    - (2) Lakes.
  - 3. Climate.
    - (1) Temperature.
    - (2) Rainfall.
    - (3) Healthfulness.
  - 4. Soil.

- V. Productions.
  - 1. Natural.
    - (1) Animals.
    - (2) Agricultural Products.
    - (3) Minerals.
  - 2. Artificial.
    - (1) Manufactures.

- VI. The People.
  - 1. Races.
  - 2. Appearance.
  - 3. Manners and Customs.
  - 4. Occupations.
  - 5. Number.

- VII. Enterprise.
  - 1. Cities and Towns.
  - 2. Commerce.
  - 3. Public Works.
  - 4. Manufacturing.
  - 5. Railroads.
  - 6. General Improvements.

- VIII. Institutions.
  - 1. Government.

        (1) Republican.
        (2) Monarchial.
    2. Education.
    3. Religion.

IX. Miscellaneous.

MAP DRAWING.

Map drawing serves a useful purpose in the study of geography. Like drawing as a separate study, the greatest value of map drawing is that it cultivates observation. It should begin in the early school years with the map of the school-room. In this simple map, be true to the conventional directions, making the top of the map correspond with the north, the right hand to the east, etc. This is quite essential. Locate the windows and doors, the teacher's desk, the stove, etc., and teach from the first something of relative size and position. Do not forget also to have the same map drawn large and small, thus teaching the scale of the map.

After pupils are thoroughly acquainted with the map of the room, extend it to the other rooms of the building if there are more than one. Then to the school grounds, taking care always that directions are carefully observed. Extend it then to the school district, the township, and later to the county and State. Along with this local map drawing may be taught much civil government and history in the oral geography work. In studying the county seat, have the county officials named, and the main duties of the offices pointed out.

After pupils are thoroughly familiar with map drawing as applied to the local surroundings, they are ready to draw maps of States and countries. The greatest purpose of map drawing is not simply copying the map from the book, but the holding of the shape of the State or country studied, in mind, so that the pupil may readily draw a map which would be recognized. This should be free-hand drawing. The accurate measurement of intersecting lines may be taught as an exercise, but maps so constructed do not have the educative value that free-hand drawing gives. The pupils should be taught to look at the map, and then to draw it from memory. In the early stage of map drawing, map tracing by a thin paper may be sometimes used to advantage, but should be discarded for the free-hand drawing as soon as possible.

Map drawing gives a clear interpretation, and the ability to read a map correctly is very essential to correct geographical ideas.

The teacher of geography must never forget the close connection between geography and the other studies, such as reading, history, language, etc. All the historical events should be located geographically. In studying the Mexican War, review the geography of Mexico, and see that pupils are able to map the campaigns of Scott and Taylor accurately. In reading of natural wonders, teach the class to associate them carefully with the place. It is not good teaching when the class has an idea that this or that is away off somewhere. They should know in what continent and country it is located.

DEVICES IN TEACHING GEOGRAPHY.

In geography, as in every other study, pupils enjoy variety. The teacher must have attention, he must have interest, or his teaching is a failure. The following suggestions may be helpful:—

1. Make good use of pictures, drawings, moldings, etc.

2. Take your class on zig-zag journeys, having them describe what may be seen or found in the places visited.

3. Have one pupil describe a river while another guesses the name.

4. Have one pupil name a river, and then the teacher or some pupil designate who shall describe it.

5. Have each pupil in the class select ten brief, simple questions on the lesson. Then each pupil in turn reads the question and designates who shall answer it. Other pupils having the same question draw a line across it. This will give a variety of questions, many of which are excellent, and if properly used, this exercise is intensely interesting.

6. Have the pupils write on the board as rapidly as they can the names of the rivers or the cities of the country or continent. Then, facing the teacher, each pupil in turn is asked to read one of the names and describe it, or tell where located. Any pupil having this name draws a single mark through it. Pupils will take a delight in seeing who can write and describe the most.

7. Have pupils draw maps on the board and leave it to the vote of the class which is the best map. If the teacher has the right influence and control over the pupils, the voting will be done honestly.

8. Encourage pupils to collect specimens of wood, flowers, fossils, minerals, insects, agricultural and manufactured articles from each country they study. A school cabinet, where such specimens can be properly

labeled and kept, will be of great interest and profit to the class.

9. Do not forget physical and mathematical geography. Have pupils explain and illustrate by drawing many of the natural phenomena, such as change of season, the tides, rainfall, the causes and direction of winds, ocean currents, land formations, the carrying power of streams, the origin of mountain ranges, and numerous other subjects in physical geography.

10. Have pupils do much written work, such as writing short paragraphs upon topics assigned, questions and outlines, or a written recitation by the topical method in which each pupil is given a topic and sent to the board to write, say for five to fifteen minutes. Assign such topics also for preparation, and have them read and criticized in class.

11. Dictate to the pupils the names of the rivers of the continent or country, and have them indicate by an arrow the direction which they flow.

12. Encourage recitation by topics. Call the topic and then call for volunteers. See that the topic is clearly stated, and if any point is omitted, let others volunteer to give the additional information.

13. Teach pupils how to study the lesson. On many subjects half of the time is lost because the pupils do not know how to study. Have them read the lesson through thoughtfully and afterward review it by topic.

14. Have each pupil name the State or country, and some pupil describe its climate, products, natural objects, and resources.

15. Let a pupil name the State while the next below names the capital of it, and so on around the class. Vary

it by having them name the capital while the next names the State or country.

16. Have pupils write a complete list of questions on a geography lesson, questions which the pupil thinks will bring out the important points of the lesson. This is an excellent drill in discriminating the important from the non-important. If they ask the teacher a question which he cannot answer, let him frankly and honestly say so, and let him try to find it out as soon as possible.

17. Require much supplementary work. The pupil who depends entirely upon his text-book in geography will never learn a great deal of geography. Send him to the magazines, newspapers, school journals, encyclopedias, the advanced texts on geography, geology, and other subjects for his information.

18. In studying about other countries, have the pupils note the characteristic things about the people, their habits, occupations, dress, morals, and civilization.

19. If possible, have pupils familiar with some of the noted songs and poems of each country. Associate Burns's poems with Scotland, Shakespeare with England, Dante with Italy, etc. The localizing of history and biography is a great awakener of thought, and serves to fasten the event indelibly with the country.

XXIII. LANGUAGE AND COMPOSITION

THE language lesson should precede formal grammar. It deals more with the art side of language. It is of more importance to the great mass of pupils. It may, if properly taught, increase the fluency, freedom, and accuracy of a child's expression. It should begin with the child's introduction to school, and English in some of its phases may well be studied in every grade, even throughout the university course.

The aim of language work is correct habits in the use of language. The only way this can be accomplished is by persistent, thoughtful drill until the use becomes habitual. The study of rules and principles will not accomplish the desired result. They may help later. They may fortify the pupil in the use of correct forms, and help to weed out improper forms; but a knowledge of rules does not guarantee correct English. The language in its proper form must be so wrought into the child's very being that when his mind is occupied with the thought, the proper expression will be easy and natural.

The language class is not the place to study and recite the simple rules of grammar. The rules given should be few, and these should have as their direct object the use in the child's oral or written language. It is the place for the child to think, to talk, and to write; and while this is being done, the teacher should give careful attention to the form of expression. Correct forms should be emphasized and incorrect ones weeded out. As the child cannot be expected to take a lively interest in mere dry language forms, they must be given interesting things to think and talk and write about. This will give occasion to use these forms in expressing thought. The child cannot, at this stage, be interested in words as words. The explanations of forms and the etymology of words, which may be ever so helpful to us as adults, can have no interest for the child. Hence the language unit should be the sentence. Correct and incorrect forms will appear in these, and when these single words are then isolated for correction, the pupils may realize the aim of their fragmentary study.

Scope of the Work.— Much of the work of the teacher of language must be directed to correcting bad habits of speech already formed. Were children all from homes of refinement and culture and pure language, the teacher's task would be lighter. The use of language is learned by imitation. The child will use the correct form or the incorrect with equal readiness. Many of us have struggled long and hard to overcome the incorrect language habits formed in early life, and have only partially succeeded. When we see children so fortunately situated that they grow up without these habits so hard to overcome, it would seem that unless their accomplishments were great, their failure were greater.

What should be accomplished in the first and second year's work in language in the common school? The following is surely not too much:—

1. To write, punctuate, and capitalize correctly —
    1. Simple statements.
    2. Simple questions.
2. To recognize readily —
    1. Name words.

    2. Action words.
    3. Place and time words.
    4. Common Adjectives.
    5. Pronouns.
3. To use correctly —
    1. Is and are.
    2. Was and were.
    3. Has and have.
    4. Do and done.
    5. Saw and seen.
    6. Sit and set.
    7. Lie and lay.
    8. A and an.
    9. This and these.
    10. That and those.
    11. Who and whom.
4. To capitalize proper nouns and all abbreviations properly.
5. To distinguish and use correctly the plurals of nouns, and to recognize and use properly the singular and plural verb forms.
6. To write a simple letter, description, or story, correct in mechanical form and language. To accomplish this will require work and drill on the part of the teacher, but it can be done.

It is true there are many errors in speech and writing, and yet almost all of them may be classed under one of four heads:—

1. The plural form of nouns.
2. The agreement of noun and verb.
3. The case forms of pronouns.
4. The tense forms of verbs.

To these we may add four others belonging more to the mechanical side:—

1. Misspelled words.
2. Wrong punctuation.
3. Wrong capitalization.
4. Paragraphing.

We then have before us the problem of language teaching. There are a number of good language books on the market for the primary grades.

Let teachers remember, however, that books, excellent as they are in the hands of a good teacher, may be made the dryest kind of lifeless formalism in the hands of an incompetent teacher. The teacher's soul must be in the work. He must be a worthy model for his pupils, and he must have such a burning desire to get results that he will work persistently to improve the language of the pupils.

COMPOSITION.

To many pupils and most teachers composition is a bugbear. To mention it is to suggest a sigh, and a wry face is not a rare thing to be seen in a class when the subject of composition is announced. The first duty of the teacher is to overcome this prejudice on the part of pupils. Until this is done, little can be accomplished in the way of real progress. Much can be done to make the composition lesson a real pleasure to pupils, and I have known classes to petition the teacher to let them write compositions rather than do other work in English.

Not all compositions are written. Writing is only one form of expression. Every one finds some way of expressing himself. If it is not in words, it is in facial expression and actions. As long as we are unconscious of this expression we enjoy it, but when we begin to write, our thoughts are clogged, our words will not come, and our sentences are clumsy and only half express our meaning. No one enjoys what he knows he does poorly. It is only after much practice that we write as readily as we talk. When pupils learn that every conversation of theirs is a composition, and that to write the same words on paper would make a written composition, they begin to lose some of their prejudice against the subject.

Mr. Palmer, in his "Self-cultivation in English," very aptly says: "First, then, look to your speech. It is commonly supposed that when a man seeks literary power, he goes to his room and plans an article for the press. But this is to begin literary culture at the wrong end. We speak a hundred times for every time we write. The busiest writer produces little more than a volume a year — not so much as his talk would amount to in a week. Consequently through speech it is usually decided whether a man is to have command of his language or not. If he is slovenly in ninety-nine cases in talking, he can seldom pull himself up to strength and exactitude in the hundredth case in writing." The same is true of children. Clear thinking and interest underlie clear writing.

Composition, or the constructive phase of English, divides readily into two parts, which may be called the *mechanical side* and the *thought side*. Let us take these more in detail.

The Mechanical Side.— Graduates from our common and high schools are wofully deficient in this. How many of them can write a letter respectably accurate in form, correct in spelling, punctuation, and paragraphing? When we read the circulars from business colleges guaranteeing positions to all sorts of persons after two to four months' study, we wonder if ignorance is bliss. They do not, however, guarantee their graduates to hold the positions any definite length of time. No young person can hope to make even a respectable beginning in a clerical career until he has thoroughly mastered the mechanical part of English composition.

This mechanical — while I designate it as mechanical I am well aware there is a thought basis for it — includes (1) spelling, (2) punctuation, (3) paragraphing, (4) arrangement of written work. Let us discuss each of these briefly before taking up the thought side, and yet keep in mind that too much attention to form in the early stages of composition is deadening to the thought.

1. Spelling.—(1) The only test of spelling is in writing. This carries with it, then, the suggestion that much of our drill in spelling should be through writing. The muscles must be trained to execute accurately the thought of the mind. This can be done only by careful and persistent practice in all written exercises.

(2) Train pupils to notice words accurately. There are many rules for spelling, but, like the systems of memory training, most of them are as hard to remember as to remember the words themselves. It is a great accomplishment to learn a new word accurately from the first, so that you have a clear mental picture of it.

(3) Use the dictionary persistently. No other way will give more growth. One of the hardest working pupils who ever came to school to me, and one whose growth was noticeable from day to day, was a girl who per-

sistently used an academic dictionary and used it intelligently. She studied carefully the spelling and derivation of every new word she met, and really mastered it.

(4) Re-read all written work. Mistakes overlooked at first will now be readily recognized, and should be corrected. A habit of careful revision is a most excellent thing.

(5) Never allow a misspelled word to go uncorrected. This should apply to all written work from the first. We too often allow any sort of hap-hazard spelling in all subjects except spelling in the composition class, and then wonder why pupils do not spell well there. Spelling, like one's religion, is for constant use and not for Sunday parade.

2. *Punctuation.*— Punctuation is of great importance, and yet it is partly a matter of taste. Teach pupils to observe the change in sense by change in punctuation. An Irishman entered a barber shop, got a shave without offering to pay, waited some minutes, and asked for his drink. The barber was astonished. The Irishman pointed to a sign, reading it thus: "What do you think? I'll shave you for nothing, then give you a drink?"

The barber corrected him at once, reading it as follows: "What! Do you think I'll shave you for nothing, then give you a drink?"

The mayor said, "The teacher is a donkey."

"The mayor," said the teacher, "is a donkey."

(1) Pupils should be taught to study carefully and observe closely the punctuation of our best edited books. The purpose of punctuation is to make clear the thought of the writer. Question pupils upon why certain punc-

tuation marks are used. Write paragraphs omitting all punctuation, and see how hard they are to read. Different readings of ancient authors are due largely to different punctuation. They wrote without punctuation marks of any kind, and modern scholars insert the punctuation to fit their own interpretation of the thought. Make a list of the most prominent uses of the different marks of punctuation, and have pupils find illustrations of them in their reading.

(2) Do not overpunctuate. The last few years has seen quite a reaction in regard to punctuation. Punctuation which does not modify the thought or aid the eye in the interpretation of the page, is useless and the tendency is away from it.

3. Paragraphing.— The paragraph is of comparatively recent date. It serves an important purpose in obtaining the thought from the page. Paragraphing is a difficult subject. Teach pupils to observe carefully the paragraphs of well-edited books. Each teacher should have a few good books on composition and especially on the paragraph.

Teach pupils:—

(1) To make each distinct topic a paragraph. Outlining a subject has its advantages. If the pupils have an outline of the subject carefully in mind, each sub-topic should be treated in a paragraph. The disadvantage of outlining the composition is that it is apt to become stiff and formal.

(2) To see that the paragraph treats of but one subject. This is the best test of the paragraph. The first and last of the paragraph being the more emphatic posi-

tions, the first and last sentences taken together should suggest the central thought of the paragraph.

4. Arrangement of Written Work.—Uniform paper is the best. The size, quality, color, etc., may be left to the taste of the teacher. Legible writing, neatness, and taste in arrangement of form are worth much. In letters, notes of invitation, general correspondence, and the like, follow the forms which custom prescribes. Show individuality without violating good taste. The following rules have been used quite successfully:—

(1) Write on one side of the paper only.

(2) If ink is used, it must be black.

(3) Size of paper, 8 1-2 by 11 inches, with marginal line 3-4 of an inch from the left.

(4) Write the title in the middle of the page 1 1-2 inches from the top, underscore three times with a wavy line. Begin the principal words of the title with capitals. Write the name on the second line beneath the title and to the left, beginning at the marginal line, and the date on the same line at the right. Underscore name and date twice with wavy lines.

(5) Begin each paragraph at least one inch to the right of the marginal line. Begin all lines except the first line of the paragraph at the marginal line. The left-hand side should be straight except the beginning of paragraphs, and these should be indented an inch or more.

(6) Do not divide syllables at the end of a line. Space so the right-hand margin will be reasonably even.

(7) Be careful about paragraphs. It is a common fault that pupils want to begin each sentence on a new line.

(8) Fold your paper once lengthwise, writing your name and the date in the upper left-hand corner.

(9) Neatness is worth much in composition work.

As an aid in correcting papers, have a correction plan in which certain letters or signs indicate certain mistakes. This is useful as a time saver. Mistakes may then be indicated very quickly by the teacher, and the pupil left to study them more carefully and make corrections.

The Thought Side.— The thought of the composition is the essential. Pupils cannot write until they have something to say. When they feel that they have a story worth telling, composition becomes a delight. The choice of a subject is important. It is one of the difficult tasks of the young teacher. Many of us have found that the task is half done when we have determined upon a subject, and the same is true of the pupil. The following suggestions may be helpful:—

(1) Choose subjects the pupils know something about. There is a tendency in young persons to choose abstract subjects, such as Truth, Honor, Virtue, The Stream of Time, Spring, Hope, etc.,— subjects which Emerson may well have chosen for essays. Notice the titles of the graduation essays in our common and high schools. How seldom we find one which is suited to the boy or girl of twelve or sixteen.

(2) Choose concrete subjects. A child can tell about his own dog long before he can write of dogs in general. Let the little girl write about her own doll, her own canary, her own play-house, instead of these things in general. Have pupils describe their own school-house and grounds, their own home, their own school-room. Let the test be how well a stranger would know their

home, their school-house, their school-room, etc., after reading their description of it. No test is better than the self-testing habit of reading the composition after it is written as if the writer were a stranger, and then see whether the composition will give him a clear view of the object or subject.

(3) The subjects should be those in which pupils are interested. Until you can interest pupils in a subject, you can get only labored expression. Some of us would find it a difficult matter to write upon Greek or Hebrew, because we know little of these subjects and care perhaps less for them. Too many of our composition subjects are Greek and Hebrew to our pupils. We choose subjects in which men and women are interested, instead of boys and girls. In teaching composition, as well as in managing a school, it is unfortunate that teachers so often forget the things of interest to boys and girls.

(4) Reproduction stories are among the simplest of composition subjects, and have an endless variety to the teachers who will select and collect them. Three plans, fitting the story in each case to the ability of the class, are often used. They can be made very simple or they can be made appropriate for the advanced class. One plan is to read the story to the class and have them reproduce it as accurately as they can. This requires careful attention, and is valuable for that alone. The story should be read slowly and distinctly by the teacher, but no notes taken. Occasionally a pupil may read the story. It may be reproduced at once or for the next day's lesson. Another plan is to have the pupil read the story once and then reproduce it in the same way. Another plan, and an excellent one for creating an inter-

est, is to read the plot or setting of the story, and then have each pupil complete the story as he thinks it should end.

(5) Biographical sketches are easy and important. Study some great character. Tell the story of his life to the class as you would something which happened on the play-ground. Have them read all they can of him, and bring other incidents. After they are full of information, have them plan and write it systematically. Then have them write the biographies of prominent men in the town or county, of the oldest man they know, of the oldest woman they know, etc. Most old persons would tell the story of their life and take pleasure in doing it, and the children may write it out and report. Let me protest against a set form or outline in this work. It is a good thing to have a suggestive outline, but they must not all be measured by the same topical yard-stick. If they are, they will be stiff and formal.

(6) The autobiography is a good composition subject, but by its very nature is limited. Akin to this is the imaginary autobiography which may be made very interesting and of wide application. The autobiography of your coat, your knife, a silver dollar, a family horse, a sponge, a slate, a pencil, a stove, and numerous other things will furnish interesting and instructive exercises for your composition class.

(7) News items give good topics for composition paragraphs. Have pupils conduct a school paper to be read once or twice a month before the school. For two years while principal of a high school, we conducted a high school paper issued in neat, high-grade form, the contents of which were selected from the composition work or written by the pupils for the occasion. It more than

paid financially, and was a good stimulus to the pupils. It is doubtful however, whether a school paper to be read before the school or to be printed can be made a success without a censorship.

(8) Newspaper interviews are good topics for compositions. Send pupils to interview persons upon certain topics and to report. If approached properly when not too busy, few men of the town will refuse an interview. Teach pupils to report with absolute fidelity to the statements made.

(9) Favorite games make good topics for composition. Let pupils describe them so accurately that the uninitiated may understand just how to play them by the description given. This makes an excellent test and is easily applied, for the pupil can reread his composition and see if it is definite. These descriptions will furnish excellent subjects for compositions for a week or ten days.

(10) Subjects for debate make interesting subjects for composition. Choose subjects of local interest when possible. Some years ago my senior class debated how to spend $150 so as to beautify our school grounds. Discussions were spirited but friendly. Some of the best compositions were published in the local papers, and the next year saw several beds of flowers, a grass plot, and a fountain in front of the school-house, the fruits of the discussion, to say nothing of its value as English composition. Teach pupils that reason and argument are the things which count in debate, and discourage all personalities so often mistaken by the ignorant as argument.

(11) The study of literature will give numerous subjects for composition. My note-book on Evangeline shows upward of twenty topics used in the past for

subjects for composition, and almost any piece of literature will give topics for written reviews.

(12) The imaginary story is one of the most interesting, as well as one of the most profitable, composition exercises. The class are given a suggestive outline to be filled out as they see fit. The topics are suggestive and yet indefinite. The pupil is free to follow his fancy, and it is a splendid way to break the ice in composition. So many pupils feel they simply cannot write. Whenever they find themselves ready to build the story suggested and to follow their own imagination, they can write freely. Below are some outlines which have been used successfully. Any teacher can readily prepare others just as good. Then again, the teacher can make a brief outline of some short story he has read, and let the pupils dress it up as they see fit.

The Tricky Goats.

1. A boy.
    1. His name.
    2. His home.
    3. Kind of boy.
2. Two goats.
    1. Their names.
    2. Where he got them.
    3. Breaking them to work.
    4. A new wagon.
    5. An accident.
    6. Result.

Going Fishing.

1. Who went.
2. Digging bait.
3. Trouble getting ready.
4. Where we went.
5. A tangled line.

6. The first bite.
7. A splash.
8. A feast.
9. Homeward bound.

A Day's Hunt.

1. How I longed for the day.
2. The start.
3. My companions.
4. Our dogs.
5. The first game.
6. A bad shot.
7. A shower.
8. Our lunch.
9. An accident.
10. Something funny.
11. What we killed.
12. Our return.

The Test.

1. Two Georgia boys in love with the same girl. She undecided.
2. A call for soldiers for the Spanish-American War. The girl said, "Go defend your country, when you return I will give you my answer."
3. A battle — wounded soldiers — a hospital — lingering fever.
4. A false report.
5. Preparation for a wedding.
6. An unexpected visitor.
7. A sudden change of plans.
8. Results.

SUGGESTIONS.

1. Composition is made a bugbear by many teachers by overcriticism. The law is almost universal that a person will accomplish more under encouragement than under discouragement, and this is particularly true of compositions.

Some years ago I was boarding in the city. There was a boy fourteen years old in the family, who was in the first year high school. He was a good boy, but not fluent in speech. Give him a hammer and a saw and a plane and some nails, and he could express himself, but it was a laborious task to do it on paper. The third week of high school he had to write a composition. He worried about it. His subject was "The Uses of the Beautiful." His teacher was a college graduate of high standing, and could have used a good-sized slice of beauty himself to advantage. The boy worked three hours on his composition, and then brought it to my room. It was stiff, but it showed honest and long-continued effort. He copied it carefully, and went to school next day light hearted.

Three days later he came home despondent, and hardly reached the room until he cried bitterly. He received his essay, and really it looked as if it had had the smallpox. It was literally cut to pieces and covered with red ink. At the bottom, in a shamefully scrawling hand, was the comment, "You will have to do better than this if you pass in English." Shame on a teacher who makes such comment on a pupil's best effort. Do you think that made his thoughts flow freely and his pen glide swiftly and accurately upon the next composition? What a difference it would have made to have written, "You made several mistakes, but you will improve, and I think you can do better next time." It is only the careless and indifferent who need such harsh statements. Then the teacher corrected every error, even to recasting the sentences to give them more strength. Had he confined his corrections to one or two faults, it would not have been so discouraging, and at the same time the emphasis centered upon these mistakes would have probably prevented their recurrence.

2. Pupils are tonguetied in expression, and to loosen their expression is the first duty of the teacher of composition. The experience of most of us when we began writing compositions was that as soon as we took up our pencil our thoughts were gone. We could not think and write at the same time. Practice alone will overcome this. The only way to learn to write is to write. To learn to swim without going into the water is perhaps as easily done as to learn to write without practicing. Get the pupil interested in the subject. When he wants to talk, it is only a step to the written composition. Encourage the timid ones. Commend honest effort. It is not so much where they stand and what they can do, but in what direction they face and their rate of progress, that counts. Some pupils feel that they simply cannot write, and nothing helps them so much as encouragement when they have made honest effort.

3. Do not be discouraged as long as there is thought in the composition. Pruning is hard work, but it can be done. Do not criticize too many things at a time. Teach the class to criticize their own work. Have them exchange papers and read them, looking for specific things, as misspelled words, proper margins, arrangement of paper, poorly constructed sentences, wrong use of words, etc. This is useful to the pupil in fixing standards of correctness and excellence. Call attention to neat, accurate papers, and to improvement from day to day. There is hope as long as the pupils have something to say. They may be crude in expression, but they will improve by watchful care and encouragement.

4. Material for expression first, and then practice, is

the order to be followed. Teach pupils to think, then write, writing rapidly after their plans are made. If they have but half an hour to write, it is well for them to spend ten minutes of the time in planning how they will treat the subject. "Out of the fulness of the heart the mouth speaketh" was said a long time ago, and it is out of the fulness of mind the hand writeth. If pupils are to describe a house, out of the abundance of material, they must select and plan how to describe it best. At first some may tell of the chimneys, then the basement, and then the roof, but by talking with the class, telling them how to describe it from some particular viewpoint, you can note an improvement in a short time.

5. Avoid nagging. Perhaps the greatest fault of the teacher of composition is the habit of nagging. The work is hard and the discouragements are many. Day after day the same mistake will be made by some pupil in the class, and often by the same pupil, and yet sourness and grumbling and fussing and nagging will not cure it nor come half so near it as a cheerful appeal to do his best, and a kindly reference to any improvement you may note, and especially an appreciation of honest effort.

6. Have pupils write for some audience, real or imaginary. Few of us care to write when no one is to hear it or read it. Then again, every composition should have a purpose and be written from that standpoint. If you will name a purpose, however, when no one, real or imaginary, is to read it, it would be a poor one indeed. Suppose a pupil is to write a letter to some little Filipino boy describing the sport of snowballing. The Filipino knows nothing whatever about the snow, and the letter would be quite different from a letter to a school boy in Ohio describing the sport of snowballing. It is often

quite as valuable, and of as much assistance to a class to know for whom they are to write as to know of what to write. Note what a difference in the tone of your letters to different people, even though you speak of practically the same things.

One of the best helps for a pupil is to be taught to read his composition after it is complete, criticizing it from the standpoint of the reader for whom it was intended. Is it clear? Is it fully expressed? Is it complete? Does it give one a definite understanding of the subject treated? Such catechizing of one's self is the best basis for correction, revision, and rewriting of the composition for final disposition.

XXIV. GRAMMAR

There was a time when formal grammar was the only phase of English studied in the school. Later a reaction came. It was found that pupils, glib in rattling off parsing, were often shamefully inaccurate in the use of English. The language lesson then came, and has gradually pushed its way to the front until we are in danger of the other extreme. Formal grammar has its place, and a creditable one, in the school course, but it should not be introduced as a study until, perhaps, the seventh year, and never below the sixth.

Pupils until that time are not sufficiently developed mentally to make a profitable study of grammar. Their time is more profitably spent in forming right habits of expression, mastering the more mechanical side of English, and in breaking up improper habits of speech already formed, than in delving into the deeper technicalities of the science of language.

There has been much confusion as to the purpose of grammar. This crops out in the definitions of grammar. Lindley Murray in, perhaps, the first exclusively English grammar written, gives the following definition: "English grammar is the art of speaking and writing the English language with propriety." Samuel Kirkham, whose grammar was only less widely used than Murray's, defines grammar as "The science of language." Thus the two views have held sway since. One holds that grammar is an art meant to improve the student's use of language, and the other that it is a science meant to give the student a comprehension of the structure of the language. A pleasing definition by one who believed that its principles should be the criterion for accurate expression is, "Grammar is the oft-despised servant, but the ever-loyal handmaid of thought's best expression."

The improvement of the child's use of language belongs primarily to the language lesson, and is based upon his power of imitation. The child's habits are largely fixed before it begins the study of formal grammar, and yet the proper study of grammar will uproot many inaccuracies and give the reason for the inaccuracy. The corrections of mistakes, however, are more incidental and could hardly be said to be the purpose of the study.

The unit of grammar is the sentence. Use is the only test of the part of speech of a word. Upon an examination in grammar in the schools of a certain city a few years ago, the applicants were asked to give three adjectives used as adverbs. One replied that an adjective could not be used as an adverb. If it were used in an adverbial sense, it was an adverb and not an adjective. He was graded zero upon that point, and yet he was right. In an educational journal recently a writer took the position that if use in the sentence were the test of a part of speech, we could have no dictionary. He forgot that the dictionary only reflects the usage of words in the sentence or in discourse. There is no word in the English language which may not be used as a noun. Use in the sentence being the test, it follows, then, that a clear understanding of the sentence with its elements and modifiers should form the basis of grammar study.

There are two methods of approaching the sentence, which may be appropriately called the deductive and the inductive. The first starts with the general principles as formulated in the grammars and goes to the individual facts. The second starts with the individual facts and builds up the general principles by comparison and classification. It matters little which of these methods is used, so long as the teacher gets proper results, and good results may be had from either. The second method is growing in favor, and under a well-trained teacher has many strong points. Perhaps the worst failure comes from the teacher who undertakes to teach the subject inductively after but a few weeks' study of the inductive method. The inspiration coming from a few weeks' study at a summer school, he begins to apply the method before he is able to make reliable generalizations, and both teacher and class are at sea, and often without chart or compass.

Whether the pupil is taught inductively or deductively, he should leave school with the ability to analyze and classify sentences and point out all ordinary mistakes. His knowledge of the sentence should be organized. Just the exact form matters little, but he should be able to divide it into its elements and classify these elements properly. This outline may be suggestive to the teacher. He may add to it or take from it, but he should make sure that the pupil has a clear and definite outline more or less complete in mind.

OUTLINE OF THE SENTENCE.

- 1^1 Kinds.
  - 1^2 As to rank.
    - 1^3 Principal.
    - 2^3 Subordinate.

- 1^4 Substantive, — may be.
  - 1^5 The subject of a verb.
  - 2^5 The object of a verb.
  - 3^5 The object of a preposition.
  - 4^5 The complement of a copula.
  - 5^5 In apposition.
  - 6^5 Independent.
- 2^4 Adverbial.
  - 1^5 Modifying an *adverb* or an adjective to express degree.
  - 2^5 Modifying a verb to express
    - 1^6 Time.
    - 2^6 Place.
    - 3^6 Degree.
    - 4^6 Condition.
    - 5^6 Manner.
    - 6^6 Purpose.
    - 7^6 Reason.
    - 8^6 Concession.
- 3^4 Adjective.
  - 1^5 Restrictive.
  - 2^5 Explanatory.
- 2^2 As to structure.
  - 1^3 Simple.
  - 2^3 Compound.
  - 3^3 Partial compound.
  - 4^3 Complex.
  - 5^3 Complete.
  - 6^3 Abridged.
- 3^2 As to use.
  - 1^3 Declarative.
  - 2^3 Interrogative.
  - 3^3 Exclamatory.

    - 4^3 Imperative.
- 2^1 Elements of the sentence.
  - 1^2 According to rank.
    - 1^3 Principal.
      - 1^4 Subject.
      - 2^4 Predicate — consists of
        - 1^5 Copula.
          - 1^6 Pure.
          - 2^6 Impure.
          - 3^6 Complex.
        - 2^5 Attribute — may be
          - 1^6 Noun.
          - 2^6 Pronoun.
          - 3^6 Participle.
          - 4^6 Infinitive used as noun.
          - 5^6 Noun clause.
          - 6^6 Adjective.
          - 7^6 Infinitive.
          - 8^6 Prepositional phrase.
    - 2^3 Subordinate.
  - 2^2 According to structure.
    - 1^3 Simple.
    - 2^3 Complex.
    - 3^3 Compound.
  - 3^2 According to use.
    - 1^3 Adjective.
    - 2^3 Objective.
    - 3^5 Subjective.
    - 4^3 Adverbial.
    - 5^3 Attendant.
    - 6^3 Connective.
      - 1^4 Coördinate — coördinate conjunction.
      - 2^4 Subordinate.

        - 1⁵ Subordinate conjunction.
        - 2⁵ Relative pronoun.
        - 3⁵ Conjunctive adverb.
        - 4⁵ Conjunctive adjective.
        - 5⁵ Preposition.
- 4² According to base.
    - 1³ First class.
    - 2³ Second class.
    - 3³ Third class.

Diagramming has fallen rapidly into disuse the past few years. It has many advantages, and the fact that it has been abused in the past is no excuse for discarding it entirely. Many a person can testify that it was through diagramming that his first real interest in grammar study began. There are a number of good systems. Each may have its good and bad points. Whatever system is used should be uniform in the school, that all may understand it. All work should be neatly arranged on blackboard or paper. Lines should be neatly drawn and the writing neatly done. Do not forget that the thought is the essential thing in the sentence, and that the purpose of the diagram is to indicate clearly to the eye that the pupil has mastered the thought. Do not make diagramming a hobby, but used legitimately it is an excellent device.

Pupils should have also a clear understanding of the parts of speech with their properties and modifications. This knowledge should be organized and definite. The pupil should be able to reproduce from memory the outline of any part of speech, giving the main divisions, modifications, and properties.

Parsing was once carried to an extreme, but now we are swinging too far the other way. Parsing consists in naming the part of speech, telling its properties and modifications, and pointing out its relation to other words in the sentence. Its main object is to train the pupil to distinguish the use of words, and thus to see the relation words bear to one another and the force they have in modifying the meaning of a sentence. It does not make one more fluent in writing, but it teaches him to understand more clearly the force of language and enables him to use it with more precision. Another object is its mental discipline. It trains the pupil to verify the definitions and the various parts of speech, their subdivisions, and their properties. This is an excellent drill.

Parsing, for beginners, should be simple, consisting mainly in naming the parts of speech. As classes, subdivisions, and properties are learned, these may be added to the above also.

Pupils should, from the very first, be taught to give the reason for every statement, and this should be continued until these reasons are fully understood. In parsing a noun let pupils state —

1. A noun, and why.
2. Kind of noun, and why.
3. Gender, person, and number, and why.
4. Case, and why.

In the sentence, "Mary bought a book," let the pupil state:—

Mary is a noun, because it is a name. Proper noun, because it is the name of a particular person. Feminine gender, it denotes a female. Third person, it is the person spoken of. Singular number, it denotes but one. Nominative case, it is used as the subject of the sentence.

Rule: The subject of a sentence is in the nominative case.

When the pupils have become thoroughly familiar with the reason for each step, a briefer form may be substituted, and with advanced classes simply the part of speech with its subdivision and its construction will suffice.

It is a profitable exercise for pupils to write the parsing, as it requires them to think and make up their mind on each point. A definite form of abbreviation may be adopted for this written parsing and carefully adhered to. Using the sentence above, the following is a good form: —

Mary, n., prop., fem., 3rd, sing., nom., used as subject, rule.

Bought, v., trans., prin. parts, buy, bought, bought, act., ind., past, 3rd, sing., rule.

Book, n., common, neu., 3rd, sing., obj., used as the obj. of verb bought, rule.

Let me emphasize in the study of grammar a thorough study of the verb. It is to be hoped that pupils learned to use the tense forms correctly in childhood. If they did, they are fortunate; if they did not, the only way to break former habits and put them on solid footing is by a thorough study of the conjugation of the verb. Here, it seems to me, is the greatest weakness of many of the recent grammars. Conjugation is scattered. There is no adequate summary of the forms. The pupils do not get a bird's-eye view of these changes. So many pupils are leaving school without the ability to use or recognize the voice, mode, and tense from the form of the verb. See that your pupils know these facts.

1. Verbs have an active and a passive voice.

2. The passive voice is formed by prefixing the various forms of the verb "to be" to the perfect participle.

3. Pupils must have these forms of the verb "to be" at their tongue's end. Do not hesitate to have them committed to memory. There is no other substitute.

4. Verbs have five modes. If your text-book gives less, accept it, but make sure of their names and what they indicate.

5. There are six tenses,— the present, present perfect, past, past perfect, future, and future perfect. Your text may not call them just these names. Do not find fault with this, but follow the text in use, and see that your pupils learn them thoroughly.

6. All these tenses are not found in each mode. The Indicative mode has all six of them. The Subjunctive mode has three,— the present, the past, and the past perfect. The Potential mode has four tenses,— the present, the present perfect, the past, and the past perfect. The Imperative mode has but one tense,— the present. The Infinitive mode has two tenses — the present and the present perfect.

7. The signs of the tenses in the different modes.

Indicative.

Present.— The simple form of the verb.

Present Perfect.— Prefix "has" or "have" to the perfect participle.

Past.— If regular, add "d" or "ed" to the simple form. If irregular, consult the dictionary.

Past Perfect.— Prefix "had" or "hadst" to the perfect participle.

Future.— Prefix "shall" or "will" to the simple form of the verb.

Future Perfect.— Prefix "shall have" or "will have" to the perfect participle.

Subjunctive.

The signs of the subjunctive — if, though, except, unless, etc., placed before the indicative forms, give the subjunctive.

Potential.

Present.— Prefix "may," "can," or "must" to the simple form of the verb.

Present Perfect.— Prefix "may," "can," or "must *have*" to the perfect participle.

Past.— Prefix "might," "could," "would," or "should" to the simple form.

Past Perfect.— Prefix "might," "could," "would," or "should *have*" to the perfect participle.

Imperative.

The verb "let," or a plain command with the simple form of the verb, indicates the imperative.

Infinitive.

Present.— Prefix the sign "to" to the simple form of the verb.

Present Perfect.— Prefix "to have" to the perfect participle.

8. Conjugation is the correct expression in regular order of the *voice, mode, tense, person,* and *number* of verbs.

9. The synopsis of a verb differs from the conjugation in that only a *singular* number and person is used.

Let me insist that advanced pupils must be thoroughly drilled on these points. They are not difficult, and they may be made intensely interesting. These points well learned give a basis for intelligent testing, and correcting many common mistakes in speaking and writing. The giving of the signs of the tenses in detail above may be pardoned when it is remembered that many of our recent grammars scatter such points throughout a series of lessons, with no attempt at summarizing them. Teachers and pupils fail to clinch the subject. In a few weeks' time a class can fasten these facts in mind until they become a permanent possession and an ever-ready criterion by which to judge the correctness of their own speech or another's.

Much practice and frequent reviews must follow. Drill on it until each member of the class is able to give readily either the synopsis or the conjugation of any verb in the active voice, and the passive also, if the verb can be used in a passive sense. Practice until they can give accurately the voice, mode, tense, person, and number of any verb with a mere glance at its form. A careful study of the verb and the other parts of speech gives mental discipline unsurpassed by any subject in the school curriculum.

XXV. LITERATURE

LITERATURE may well be called the appreciative phase of English study. The teacher who can lead a child to the proper appreciation of a piece of literature, places that child on a higher plane. The beauty, the uplift, the inspiration which comes from a beautiful thought clothed in beautiful language sinks deep, and eternity alone can measure its influence. Where can you find a more potent sermon, a clearer picture of sordid life, than in the prelude of Whittier's "Among the Hills"? Let our pupils commit these lines to memory, and see the picture, and the inspiration for better conditions will come, and with the inspiration the homes of our country will take on a different aspect.

"I look
Across the lapse of half a century,
And call to mind old homesteads, where no flower
Told that the spring had come, but evil weeds,
Nightshade and rough-leaved burdock, in the place
Of the sweet doorway greeting of the rose
And honeysuckle, where the house walls seemed
Blistering in sun, without a tree or vine
To cast the tremulous shadow of its leaves
Across the curtainless windows from whose panes
Fluttered the signal rags of shiftlessness;
Within, the cluttered kitchen floor, unwashed
(Broom-clean I think they called it); the best room
Stifling with cellar damp, shut from the air
In hot midsummer, bookless, pictureless
Save the inevitable sampler hung
Over the fireplace, or mourning piece.
A green-haired woman, peony-cheeked, beneath

Impossible willows; the wide-throated hearth
Bristling with faded pine boughs half concealing
The piled-up rubbish at the chimney's back;
And, in sad keeping with all things about them,
Shrill, querulous women, sour and sullen men,
Untidy, loveless, old before their time,
With scarce a human interest save their own
Monotonous round of small economies,
Or the poor *scandal* of the neighborhood;
Blind to the beauty everywhere revealed,
Treading the May-flowers with regardless feet;
For them the song-sparrow and the bobolink
Sang not, nor winds made music in the leaves;
For them in vain October's holocaust
Burned, gold and crimson, over all the hills,
The sacramental mystery of the woods.
Church-goers, fearful of the unseen Powers,
But grumbling over pulpit tax and pew rent,
Saving, as shrewd economists, their souls
And winter pork with the least possible outlay
Of salt and sanctity; in daily life
Showing as little actual comprehension
Of Christian charity and love and duty,
As if the Sermon on the Mount had been
Outdated like a last-year's almanac:
Rich in broad woodlands and in half-tilled fields,
And yet so pinched and bare and comfortless,
The veriest straggler, limping on his rounds,
The sun and air his sole inheritance,
Laughed at a poverty that paid its taxes,
And hugged his rags in self-complacency!"

But what constitutes pure literature? By what criterion do we draw the line between literature and other forms of writing? What distinguishes pure literature from the news article? What distinguishes literature from the statements of history or of scientific truths?

The criterion is, that the constructive energy of pure literature is *"universal, ideal, emotional life."*

1. Pure literature must be universal. Lowell tells us that a literary man cannot air his private liver complaint to the public. He tells us again in another place his conception of literature: "Literature that loses its meaning, or the best part of it, when it gets beyond the parish steeple, is not what I understand by literature. To tell you when you cannot taste a book that it is because it is too thoroughly national, is to condemn the book. To say it of a poem is even worse, for it is to say that what should be true of the whole compass of human nature is true only to some north-and-by-half-east point of it. I can understand the nationality of Firdusi when, looking sadly back to the former glories of his country, he tells us that 'the nightingale still sings old Persian.' I can understand the nationality of Burns when he turns his plow aside to spare the rough burr thistle, and hopes to sing a song or two for dear old Scotia's sake. That sort of nationality belongs to a country of which we all are citizens — that country of the heart which has no boundaries laid down on the map."

2. Pure literature must be ideal. The lessons it brings are the ideals of the soul's possibilities. It quickens in the individual soul the inspirations which are universal. The beautiful friendship of Damon and Pythias is above our selfishness — an ideal lifting us above ourselves, creating in us higher aspirations and showing us our own possibilities. There are of course various degrees of idealization. Heroism may be idealized and uplifting, and yet not be to the degree of idealization of Enoch Arden. The strength and beauty of woman's devotion may be well worth emulation, and yet not reach the standard of Evangeline.

3. Pure literature must be emotional. It deals more with the heart than the head. The emotions of literature are of various kinds, but they may all be summed up in the emotions of spiritual freedom. The soul is constantly struggling to free itself from bondage, and every time a limitation is removed the soul leaps with joy. Here lies much of the educative power of literature. The all-inclusive pleasure of literature is the soul's joy in its hopes and its possibilities of freedom. The reader, if he really reads, is forced to live the ideal life pictured in literature, and thus from day to day his soul attains unto higher levels.

In the study of a selection of literature the first thing is to find the author's theme. The second is to test this theme by the questions: (1) Is it universal? (2) Is it ideal? (3) Is it emotional? These tests will determine the class of literature to which it belongs.

The theme of literature is its soul or purpose, but this soul must have a body. The writer of literature does not speak in abstract terms. He embodies his thoughts in concrete, visible forms. The ideal image is presented in the real, the universal in the individual, and these objective or concrete particulars become types or symbols of the abstract or the universal. Thus Hester, in the "Scarlet Letter," and Jean Valjean in "Les Miserables," are realizations of universal principles in human nature. The building and the launching of the ship with Longfellow are typical of human life. He who reads "Evangeline" and sees nothing but Evangeline the individual, loses most of the poem. Evangeline is the concrete, individual form or embodiment of the abstract and universal — woman's devotion. To see the universal symbolized by the particular, to see Evangeline no longer as an individual, but as a type, an ideal to which our own soul may aspire, gives life to the study of literature and makes it a monitor to our soul.

Language is the medium which carries the theme through the embodiment to the reader. In other forms of art, as sculpture and painting, the embodiment stands alone, and the reader must make out of it what he can. Literature, however, is more plastic. It may represent the change, the rate of progress or development. Language brings a vivid image before the mind, and may give the meaning of the image in terms of life. Literary language must be beautiful. Its interpretation must yield æsthetic pleasure — not only æsthetic pleasure, but sensuous pleasure, also. It must caress the ear. These pleasing qualities give rise to euphony, rhythm, and rhyme in all its various forms. It includes alliteration and the balanced sentence. Language has both a form side and a sense side. It is the incarnation of thought, and the soul is indispensable to the body. Language also awakens sensuous pleasure by stimulating the imagination and the judgment. The connotation of the language is often more than the denotation.

In Institute work requests often come for a discussion of college entrance requirements in literature. One such query asks that the discussion be made for those teachers who have charge of the smaller high schools and *to make it specific so that a teacher with little special training may find it helpful.*

I shall begin by saying that the greatest fault, perhaps, in the study of such literature is the vagueness and indefiniteness of the views of both the teacher and the pupil. The pupil does not know what to look for and the teacher does not know what to teach. You cannot expect clear-cut, definite knowledge on the part of the pupil when the teacher's view of the subject is a vague, indefinite, shadowy something, — a ghost-like shape of generalities — he hardly knows what.

The College Entrance Requirements are divided into two parts: (*1*) *Those for Critical Study;* (*2*) *Those for General Reading.*

Taking up the first part, those for critical study, I should summarize the aims of the study as follows:—

1. To secure a careful study of a few representative masterpieces of different periods of English Literature, and to make this study intensive and reasonably exhaustive.
2. To secure as complete an understanding of the author's thought as is possible. This will require pupils —
    (1) To learn all new words with any peculiar meaning the author may give them.
    (2) To understand all historical, geographical, biographical, Biblical, literary, or mythological terms.
    (3) To understand the grammatical structure of sentences.
    (4) To understand the force, beauty, and fitness of figurative expressions.
3. To be able to imagine, with vividness and accuracy, the places, persons, and scenes as the author saw them in his mind's eye.
4. To feel the emotions the author felt in the creation of the literary character.

5. To find, as far as possible, the elements of force, beauty, sublimity, humor, or pathos, in the author's language.
6. To learn standards for judging literary art.
7. To learn how to study a selection of literature, so the method can be used in the study of other selections.
8. To store the mind with gems of prose and poetry, to assimilate them and recite them orally, with force and effectiveness.
9. To appreciate the selection studied. This is one of the greatest aims, and upon it depends the effectiveness of literature as an uplifting force in the lives of pupils.

The second part of those selections for general reading are to be studied mainly outside of the class-room. The aims are:—

1. To acquire the power of reading books intelligently and more or less rapidly under the guidance of the teacher.
2. To present written reports, or abstracts of books read, and to show in these reports the ability to apply the principles and methods learned in the critical study.
3. To write brief essays on topics assigned from the books read, showing the power to read and assimilate.

These aims are legitimate. The best preparation on the part of the teacher is careful and intensive study of the selection itself. Then, if possible, let him read the criticisms and notes of some one who has made literature a special study. Avoid overcriticism and do not dwell upon the minor details too much until the pupils have a view of the selection as a whole. The selection should be read to be *enjoyed* rather than to be picked to pieces and destroyed.

Inquiries come also from teachers who have but a limited knowledge of literature. They do not feel themselves able to go into the forces back of literature, and yet want specific help.

Let us take up that great American classic, "Evangeline." I feel that it is almost unpardonable for a boy or girl to leave school at the end of the common school course without having read and become familiar with this beautiful poem. Its sadness, its sweetness, its purity, its simple story, its beautiful language, and its noble sentiment combine to give it interest to the pupil and to make it an uplift to better emotions and a higher life. I say I feel that it is almost unpardonable for a pupil to complete the common school course without having read this poem, and still more so for the teacher not to have studied it carefully, especially since it may be had post-paid in a very readable form for a few cents.

Much of the success of the work comes from the teacher's familiarity with the poem. He should read it and re-read it and study it critically until he is familiar with it in all its details. This careful reading will produce enthusiasm in the teacher if there is any about him, and enthusiasm is as contagious as the smallpox, without its harmful results.

I should recommend the following order of study for the class:—

1. Have the class familiar with the main facts of the author's life. This will be one of the best incentives to read other poems written by him. They may read his biography, or the teacher may give the main facts

of his life and have the pupils copy them in their note books.

2. Give a brief history of Acadia. This historic setting is necessary to a proper understanding of the poem.

3. Read the poem with the class, giving particular attention to the story. You can gauge the pupil's appreciation of the poem by the way he reads. The teacher may well read passages often, giving natural expression to the pathos, and teaching pupils to avoid that monotonous *sing-song* tone so often heard in the reading of poetry.

4. Read the poem a second time, marking the beautiful passages and having pupils point out why they are beautiful.

5. Composition work based upon "Evangeline."

6. Have pupils commit many of the beautiful quotations.

This can be made very interesting, and no teacher should fail to have the pupils store their minds with the beautiful expressions — gems of thought and sentiment, jewels of their kind — which will bless and brighten and uplift in after years.

7. Study the language and form of the poem as critically as the advancement of the class will permit. Remember, however, that literature belongs to the appreciative phase of English, and do not disgust the pupils with dry forms. Let your criticism be more toward pointing out the good than the bad qualities.

When the pupils have read the poem and reviewed it, they should have the story in mind something as indicated by the outline given below:—

OUTLINE OF EVANGELINE.

- 1^1 INTRODUCTION.
  - 1^2 A description of Acadia.
  - 2^2 Foreshadowing of the story.
- 2^1 PART I. THE BANISHMENT.
  - 1^2 Evangeline's home.
    - 1^3 Grand Pre.
    - 2^3 Evangeline's family.
      - 1^4 Description of Benedict.
      - 2^4 Description of Evangeline.
    - 3^3 The house and surroundings.
  - 2^2 Evangeline's childhood.
    - 1^3 Her playmates.
    - 2^3 The sports.
      - 1^4 Watching the blacksmith.
      - 2^4 Coasting.
      - 3^4 Searching the swallow's nests.
  - 3^2 Evangeline's youth.
    - 1^3 Suitors.
    - 2^3 Gabriel.
  - 4^2 The betrothal.
    - 1^3 Time — Indian summer.
    - 2^3 The evening.
      - 1^4 Scene outside.
      - 2^4 Scene inside.
        - 1^5 Benedict singing.
        - 2^5 Evangeline spinning.
    - 3^3 The contract.
      - 1^4 The parties.
        - 1^5 Benedict.
        - 2^5 Basil.
        - 3^5 Evangeline.

      - 4^5 Gabriel.
      - 5^5 The notary.
    - 2^4 Rumors of English fleet.
    - 3^4 Rene Leblanc's favorite story.
    - 4^4 The dowery.
    - 5^4 The singing.
    - 6^4 The parting.
  - 4^3 Evangeline's musings.
- 5^2 The day of the proclamation.
  - 1^3 The feast of betrothal at Benedict's.
    - 1^4 The feast.
    - 2^4 The dancing.
    - 3^4 The fiddler.
  - 2^3 The assembling of the men at the church.
  - 3^3 The proclamation.
    - 1^4 Provision of.
    - 2^4 The effect of.
      - 1^5 Basil's Protest.
      - 2^5 Father Felician's appeal.
      - 3^5 The prayer.
      - 4^5 The resignation.
  - 4^3 Loneliness of Evangeline at home.
- 6^2 Preparation for exile.
  - 1^3 Gathering of household goods by the women and children.
  - 2^3 The march from the church to the seashore.
  - 3^3 Confusion on the shore.
  - 4^3 The burning of Grand Pre.
  - 5^3 Death of Benedict.
  - 6^3 Evangeline swoons.
  - 7^3 Burial of Benedict.
  - 8^3 The embarkment.
  - 9^3 The departure.

- 3[1] PART II. THE WANDERING.
  - 1[2] Scattering of the Acadians.
  - 2[2] Evangeline's search for Gabriel.
    - 1[3] Trip down the Mississippi.
      - 1[4] Scenes along the shore.
      - 2[4] They leave the Mississippi.
      - 3[4] Evangeline's dream.
      - 4[4] The Passing of Gabriel.
    - 2[3] Basil's home.
      - 1[4] The meeting.
      - 2[4] His prosperity.
      - 3[4] The merry making.
      - 4[4] Evangeline's sad musings.
      - 5[4] The departure.
    - 3[3] Trip to Adayes.
    - 4[3] Trip to the Ozark Mountains.
    - 5[3] The Shawnee woman.
    - 6[3] The mission.
      - 1[4] The Black Robe chief.
      - 2[4] The stay at the mission.
    - 7[3] The cabin in Michigan.
    - 8[3] The search ended.
  - 3[2] Evangeline's resignation.
    - 1[3] The pathway cleared.
    - 2[3] Gabriel not forgotten.
    - 3[3] Evangeline's hope.
    - 4[3] Becomes a Sister of Mercy.
  - 4[2] The meeting.
    - 1[3] The pestilence.
    - 2[3] The hospital.
    - 3[3] The recognition.
    - 4[3] The prayer — "Father, I thank thee."
- 4[1] THE CONCLUSION.

When the pupils have mastered the poem as a whole and have also the details of the parts as the outline above indicates, they have plenty of material for short compositions. Few teachers will find any trouble in securing interest in this work. Have pupils read the compositions in class. Point out the good qualities of the different compositions. Commend where you can. Do not discourage. Do not point out too many mistakes in a paper, especially if the pupil is timid. Make your severest criticism on those who *can* do well but have neglected to do so.

In my copy of Evangeline the following topics for written work are found:—

1. Describe Grand Pre.
2. Write a description of Benedict's home.
3. Write a character sketch of
    (1) Evangeline.
    (2) Benedict.
    (3) Rene Leblanc.
4. Describe an Indian summer day in Acadia in 1755.
5. Tell the story of the betrothal.
6. Relate the notary's favorite story.
7. Describe the betrothal feast.
8. Describe the scene at the church upon the reading of the proclamation.
9. How the evil tidings were received by the women.
10. The preparation for departure.
11. The last night in Acadia.
12. The death of Benedict.
13. Draw a map showing Evangeline's wanderings.
14. The trip down the Mississippi.
15. The journey to Opelousas.
16. Basil's Southern home.

17. Basil's appearance and welcome.
18. A feast at Basil's.
19. The pursuit of Gabriel.
20. The Indian woman's story.
21. Evangeline at the mission.
22. Evangeline's search after leaving the mission.
23. Evangeline, a Sister of Mercy.
24. The meeting.
25. Two graves.

These twenty-five topics are only suggestive. The teacher may change, omit, or add to them at pleasure. The length of the written article may vary. Teach the pupil to write the story or description so that the listener may get a clear understanding by hearing it read.

The class is now ready to go into a critical study of the poem. How far they shall go is to be determined by the teacher who knows the ability of the class for this kind of work. The following outline may indicate the study:—

1[1] WORDS. Make a list of the words which are new to the pupils.
  1[2] Definition.
  2[2] Derivation.
  3[2] Use in the sentence.

2[1] GRAMMATICAL CONSTRUCTION. See that pupils get the sense from the reading. This may require the diagramming and analysis of some of the sentences. Do not spoil the literature, however, by too much drudgery of this kind.

3[1] FIGURES OF SPEECH.
  1[2] Make list and explain use of.
    1[3] Similes.

2^3 Metaphors.
3^3 Personification.
4^3 Metonymy.
5^3 Alliteration.
6^3 Climax.
7^3 Hyperbole.
8^3 Allusions.
  1^4 Biblical. These are especially significant. Have pupils to look up the following:—
    1^5 The penitent Peter. Line 96. See Matt. 26:75.
    2^5 Jacob of old. Line 153. Gen. 32:24.
    3^5 Line 381. Gen. 21:14.
    4^5 Line 472. Isa. 9:6.
    5^5 Line 479. Luke 23:34.
    6^5 Line 485. 2 Kings 2:11.
    7^5 Line 507. Ex. 19.
    8^5 Line 597. Acts 28:1-10.
    9^5 Line 821. Gen. 28:12.
    10^5 Upharsin. Line 1044. Dan. 5:25.
    11^5 The prodigal son. Line 1063. Luke 15:11-32.
    12^5 The foolish virgin. Line 1064. Matt. 25:1-12.
    13^5 Line 1095. Gen. 25:12.
    14^5 Line 1312. Mark 14:7.
    15^5 Line 1355. Ex. 12:21-30.

4^1 THE METER OF THE POEM.
  1^2 Have pupils scan the poem.
    1^3 Effect of hexameter.

- 2^3 Effect of dactylic foot.
- 3^3 Note any irregularities.
- 4^3 Show that the form and sentiment are in harmony in the poem.

These suggestions may help some teacher to better present this beautiful poem to his class. Let the teacher bear in mind that it is often impossible to *test* a pupil's appreciation of literature by any sort of examination. Literature is a fine art. We cannot measure the influence upon a young artist as he stands before a masterpiece and drinks in its soul-inspiring theme. But it is none the less true that constant contact with such things leaves their impress upon the soul, and leads to refined taste and finer appreciation. The pupils who have made a study of "Evangeline" will be unconsciously uplifted, not all to the *same* degree, but all to *some* degree; and in days to come they will find a growing faith in the affection *"that hopes, and endures, and is patient,"* and *"in the beauty and strength of woman's devotion."*

XXVI. HISTORY

The subject of history is of comparatively recent date in the curriculum of the common schools, but perhaps no subject is more easily justified in the school course. It is true that much of the work is dull, and that our older texts attach too much importance to dates and battles and bloodshed, and not enough to the real life of the people and the development of the country. But these are faults of the text-book and the teacher, and not of the subject itself. Few subjects are more interesting or more inspiring or richer in practical results than history when properly taught.

Some of the purposes of teaching history may be stated:—

1. To teach the facts of the past. It is true this has been overdone. Facts, the driest of facts, nothing but facts, have been poured into the minds of children by teachers whose teaching was as dry as the facts themselves, and the children have become disgusted with the whole subject. Dickens' "Gradgrind" might revel in the subject to his heart's content. No one objects to facts in history; they must form the basis of all correct judgments of the past and predictions of the future; but the protest is against forcing these dry facts upon the pupil before the pupil is mentally able to appreciate them. In a prominent State history used in many of the schools of the State, the greater part of the book is taken up with the history of the organization of the counties of the State. There are many interesting and valuable facts given, but let me ask you, a man, a citizen, and an intelligent voter, how much do you care to burden your mind with the exact boundary and the local history of a large number of counties in your State? Unless there is a principle of more than local interest involved, you care nothing. Then why force such stuff upon school boys and school girls who can understand less and who care less than you do for it?

2. To create a love for country and a determination to give one's life, if need be, for one's country. A love for country and a patriotism which shrinks from no responsibility should be the product of our schools, and no subject in the course can touch or quicken and develop such patriotism so well as history. By this is not meant mere gush and Jingo patriotism, which soars and soars and talks and does nothing; but that deeper, calmer patriotism which recognizes that a life of virtue and labor and love and devotion to duty in many of the common walks of life is after all the highest patriotism. It should instil a love for many of our uncrowned heroes of common life, who, working all about us, honestly doing their best and contentedly, are silently shaping the highest destiny of our country.

3. To create high ideals of national conduct and good judgment upon national affairs. This is a most important purpose in a free country like ours, a republic whose humblest citizen has a voice in her affairs, and may be called upon to represent her in national or international councils. The intelligent study of history in the common schools should lay a good foundation upon which the future citizen may build.

4. To teach the principles underlying the facts of history. In advance history the pupils should trace the cause and effect of events. This alone will make intelligent citizenship. Each individual is what he is from three sources, (1) his inheritance, (2) his own exertions, (3) his environment. Nations owe their life and advancement to the same forces. The problems suggested by an attempt to trace cause and effect logically in history are worthy of the best minds and give the best of mental discipline. To trace the life of the great nations of the world and their influence on the world's history, and to see how these nations have been influenced in their progress by (1) the innate qualities of the race, (2) the constant upward progress of each generation, (3) the soil, climate, mineral resources, bodies of water, mountains, rivers, etc., is the highest form of history teaching. These things belong to a proper study of history in our advanced classes.

5. *To give intellectual discipline.* No subject in the school course appeals more strongly than history to all the powers of the mind. Too often we teach history as if the memory were the only faculty of the mind required; but if properly taught, the memory, the imagination, the reason, the judgment, as well as the will, are cultivated, giving as near a symmetrical mental development as any subject in the school course.

6. *The cultivation of the moral nature.* Nowhere is the child's sense of right and wrong more often exercised than in history. It deals with the actions of men, and these actions contains a moral element. We may see the motives which inspired these actions as well as the results which follow from them. We see the consecrated work of the good, the unselfish devotion of the patriot, the heroic fortitude of the martyr, and these noble actions lift our lives to higher planes. On the other hand, we

see the meanness of the ignoble, the craftiness and falsehoods of the unprincipled, and the baseness and corruption of the degraded, and they are repulsive to us. Our better nature instinctively turns away from the low, the groveling, and the vicious to the pure, the noble, and the virtuous. Standing in contrast are the noble and the ignoble, the generous and the selfish, the honest and the dishonest; and these contrasts awaken in us an admiration for the right, and teach us to detest the evil. We read the deeds of heroes and patriots, and long to emulate them. Our mind is stimulated to higher things and to right conduct. Send the boy to the inspiring pages of history, full of life and action and noble deeds and heroic efforts, for moral culture, rather than to the abstract truths of moral philosophy.

PRIMARY HISTORY.

My observation has been that history is frequently uninteresting to pupils, and that teachers often dislike to teach it. There are causes for this indifference. Among other causes are the following which contribute to make history distasteful:—

1. The manner in which the pupils begin the study. Frequently the first introduction to history is a text-book too difficult for the pupil to read, and made up of the driest kind of facts. Often this book is a dog-eared, thumb-worn, broken-backed old book which has been used by one or more older pupils of the family. I should prefer boys to wear second-hand, cut-down, made-over clothes and girls to wear last summer's hats to taking up a new study in an old book. It is hard enough to begin with a new book, but to begin a new study with an old book is abominable.

2. The child's mind is crammed with facts and dates and causes and effects before its mind can grasp them or the significance of them. You know how dry and uninteresting the local news items from a country post-office are, as they are given in the country newspaper. To read them is laborious in the extreme. If, however, you occasionally come across an item about one of your friends, it catches and holds your attention at once. The item may be nothing more nor less than that Tom Jones' cow broke her leg and had to be killed. But Tom Jones was your boyhood friend. Whatever concerns him concerns you, and this one item about your friend will add interest to a whole column of kindred items.

3. The teacher has no definite object in view in the recitation, and does not have the details of the lesson in mind. Nothing destroys the interest of the class quicker than this hazy, indefinite knowledge of the lesson on the part of the teacher. The teacher should have a clear outline of the topics to be presented in the lesson, and know the details of these topics and their relation to other topics before presented, as well as those to follow in subsequent lessons. The teacher is to know the lesson until he needs no text-book. When he is full of the subject, he is ready with pertinent questions, and the recitation is full of life and interest. When the teacher gets near his margin of knowledge in the history recitation, as in other subjects, he begins to hesitate and stammer, and to ask cloudy questions, and to run off at a tangent from the subject. Pupils intuitively know it, and interest wanes.

4. Teachers do not review often enough. Pupils should review the facts of history frequently. Impressions must be made over and over again upon the minds of the pupils if they are to remain permanently. After pupils have taken up the text-book and have completed an administration, they should be able to recall quickly and accurately the principal events of that administration, and to give something definite about each event. They should have a bird's-eye view of each administration, and be able to give some of the details of each event. Each of these topics will form a nucleus around which may be grouped a number of facts of history learned in later life.

5 Teachers too often recite the history lesson. Nothing is more deadening than the constant talk of the teacher in the history class. He must, it is true, be familiar with every detail of the lesson, not for the purpose of telling the class about it, but to guide and direct the pupils in their discussions. His questions should be to the point, and such as test the pupils' knowledge of the subject as well as to stimulate thought and to suggest further study. It is a wholesale waste of time and energy to tell the story of the history lesson to the class until their minds are placed in a receptive attitude. The teacher's enthusiasm must be so great and so genuine that it is contagious with the children. This enthusiasm must arouse curiosity and a desire to know on the part of the pupil, until they hunger for more and are willing to read and listen to learn more. Then to impress the work more firmly, the *pupils* and *not* the teacher are to recite it.

If the things named above cause lack of interest in teaching history, our endeavor should be to avoid them. What, then, should be the primary or elementary work in United States history?

1. The work for the first two years at least should be oral. If the children begin the study of history by using a text-book, they are apt to commit the words of the text only. The historical fact escapes them in their effort to get the words. If the work is presented orally, the pupils will be trained to remember the facts and reproduce them in their own language. A boy does not fail to understand the story of an accident on the playground or in town if he listens to some one relate it. He may warp the truth and swell the details, but he has no trouble in relating the story itself. So it is with oral work in history. The written form of the language is eliminated, and the child is concerned with the facts only. When the pupil again relates the facts, then will come the time for pruning.

2. The study of history should begin with biography. The pupils are interested in individuals long before they are in events. Select twenty-five great names from American history, as Columbus, DeSoto, Ponce de Leon, LaSalle, John Smith, Miles Standish, Nathaniel Bacon, George Washington, Benjamin Franklin, Daniel Boone, David Crockett, Sam Houston, Andrew Jackson, John C. Fremont, Abraham Lincoln, Robert E. Lee, U. S. Grant, Peter Cooper, John Jacob Astor, George Peabody, Captain Eads, Thomas A. Edison, and others. Prepare yourself on the lives of these men. Let me emphasize the words, *prepare yourself*. Here lies the secret. Make a study of these men. Get the incidents of their lives at your tongue's end. The material is plentiful. Books and educational journals and magazines are all about you, but you must *gather* and *organize* and *master* it. You cannot use it in dry, set statements, nor rely for material upon what you remember from carrying an advance class over the work.

The fact that many teachers in their history work in the primary grades rely upon the material they may happen to remember from having an advance class in the subject, accounts for the dulness of the study. It is not expected that you be prince of story tellers. If you were, you would not be apt to be teaching at forty dollars per month; but you can grow along that line. Tell the story of these men's lives with vim and enthusiasm. If ninety per cent. of your pupils do not listen and become interested and follow you carefully, you are to blame. If you fail, try it over again. Read up, study up, think out, plan your story, and at last you will gain the power of interesting the pupils. Your own enthusiasm will count for much. Enthusiasm is contagious, and an epidemic of enthusiasm is good for both teacher and pupils, especially in primary history.

Review and talk about these from day to day. Have the pupils tell you about these men. Be patient, be interested yourself, and you will be surprised how much the pupils will remember and how interested they will become. Have them write the stories for language work, and correct, revise, prune, and make clear any points they have misunderstood.

3. Then select twenty-five great events in United States history, and prepare them as thoroughly as the biographies. Study and plan so you can present these events to the class in the best possible manner. Have the details well in mind. Have them well arranged, and relate these events to your class just as you would describe to them a new game or the story of a school picnic. Be natural in your manner, speak in conversational tones, and the pupils will listen and remember. Have them get other information and then relate the story to you again. See how their eyes sparkle and how their tongue is loosened as they vie with one another in telling the story. Train them to tell it well. What one forgets another will think of. Then have them write the story in good correct English. It will be a good basis for their language work. You will now find inaccuracies cropping out. Correct these, and train your class to notice them.

The above will lay the basis for two years' oral work in history before the pupils take up a text-book. They will be familiar with several of the famous men and events—these will be their old friends, and when later they meet them in using the text-book these names will illumine pages of text which otherwise would be dry and uninteresting, as the item concerning your friend's cow gave interest to a page of locals.

The class is then well prepared for a primary text-book in history. Nothing is a better index of improvement in our schools than to note the progress made in our text-books in the last two decades. There are a number of good text-books on the market now in primary history suitable for pupils beginning the use of a book. Make your choice carefully, and let the pupils each be supplied with a book. Teach them to study subjects rather than pages, and to arrange the headings or topics under the subjects. These topics are the framework which should be clothed in words. The first preparation on the part of the teacher is to master the text. Get the author's outline in mind, even to the details. This is no great task if an outline is made, and it is essential to the best teaching. Remember it is not the teacher's place to recite the history lesson, but the pupil's. The teacher who is a skilful listener is a great inspiration to a history class. Careful attention to the child's story and an appreciation on the part of the teacher will get interest and best effort from the pupil. By this means the pupil is led to think the story as a connected whole, and will grow in power of both thought and expression.

Before leaving a subject, the pupil should have in mind a definite outline, more or less complete, according to his age and mental ability, of the subject as the author treats it. These topics should be kept in mind, forming a nucleus around which he may ever after group other facts and information upon the same topic. By such associations alone can we make permanent mental accumulations of historic facts.

ADVANCED HISTORY.

If pupils have been properly introduced to history, they should love it, and now they are ready for a deeper study of the subject and for a more advanced text-book. Such a text may deal more with cause and effect, but even here there is danger of dry facts and generalizations which are above the mental grasp of the pupils. There has been much theorizing of late upon methods of teaching history, and no doubt much good has resulted from it. Our histories have been too long a record of warfare and battle, and too little of the real life of the people. The blood-and-thunder side has overshadowed all else. We are now swinging away from that extreme, and it may be a decade or two will carry us to the other extreme. Many of our writers are dry and prosy in their descriptions of common life, and the boy passes through a stage of development when the blood-and-thunder side appeals to him and nothing else will. The theory now advocated by prominent educators, a number of them from normal schools, that the child's history work should trace the growth of civilization, has much truth in it, but it may be easily overdone unless the children are in skilled hands and under almost ideal conditions. There is little more reason for beginning the history with primitive life than that the child should actually live as the primitive man did. The child's heritage of the past makes it possible to begin life with the home surroundings and comforts of civilization, and it is as hard for the child to imagine the primitive life as the more complex life of the present. Recently I heard a learned man advocating that we should begin the study of history in our public schools with the history of England instead of the United States. It was impossible, said he, to understand the history of our own country until we knew the history of the mother country. Even under the charm of his eloquence, one could not help but ask in his own mind, if it were possible to understand the history of the mother country without knowing the history of the grand-mother country, etc. Then the story of a small boy who was a great doubter came to mind. His teacher showed him the letter A, and asked him what it was. The boy said promptly, " I don't know." The teacher told him it was A. The boy asked at once, " How do you know? " The teacher said that when he was a boy his teacher told him it was A. " Well, how did he know? " asked the boy. The teacher then explained that his teacher's teacher said it was A. The boy asked again, " How did he know? " and so on until it had been traced through a number of generations. At last to satisfy the boy, the teacher told him the man who first made it said it was A. *" Well,"* replied the boy, *" how do you know but what he lied about it? "* Some of us are much like the boy when it comes to history study.

Master Some Good Text.— Extremes are to be avoided, but after the text is selected, the thing for the pupil to do is to master it. There has been a reaction of late against text-book work. Many teachers, loud in their clamor to throw the texts out of the window, would know and understand far more history had they really studied carefully and mastered one good text. Our authors are liable to gross errors, but mastering a text does not mean swallowing everything the author says, but it does mean *knowing what he says.* After the class knows accurately what the author says, and understands the author's language, then comes the time for further investigation and agreement with or dissent from his views. This does not mean lifeless cram of text-book, but thoughtful mastery of the author's thought and language. Enliven it with questions and discussions, but see that, above all, the pupils know what he says, and then translate, as it were, into their own language and experience. Then and then only do they understand it.

The pupil too often studies history as if it were something away off, and had no connection with anything about him. It should be in fact " his-story," the author's story of what has happened and why it happened as it did. When the pupils can call it up face to face, and read it as a narrative of what has happened, they will soon be able to get an outline view of history from the author's standpoint, and from this view and from the topics here learned they can ever after add to, expand, and fasten new knowledge. It is a fundamental law of mind that we interpret all new knowledge by the old, and these topics are the hooks upon which the new knowledge may be readily assorted and hung.

Read Other Texts.— It is not meant to imply that pupils should study one text-book on history and only one. Improved methods may be good. Many devices are excellent for getting interest in the history class, but nothing will take the place of a thorough preparation of the lesson from day to day, and a constant review and fastening of the facts in mind according to some systematic plan — a plan which will give the pupil a bird's-eye view of the subject with the proper co-ordination of topics. The teacher who fails to give his history class that view, fails in teaching history, however much he may follow new and improved methods.

Pupils should be taught early how to use other authors intelligently. Half our pupils and many of our teachers do not know the value of an index. Some weeks ago a teacher of prominence, after looking in vain for a topic in a work on civics, asked me if I remembered where the author treated of the point in question. In two minutes I had turned to the index and then to the page. Pointing to the topic, I gave him the book as he exclaimed, " I never thought about going to the index." So it often is with our pupils. Teach them to make use of the index and to find the topic they are looking up. If the topic is not given exactly as they have found it stated in their own text, let them learn to use the good common sense method, and look under another title for what is practically the same subject. It is deplorable that so many pupils and teachers are lost and bewildered when in a library. No study is better than history to train pupils to an intelligent use of books other than their texts. They must be taught to get the information they want with the least possible outlay of time and effort, and to be able to find what they want when they have the books before them.

The Cross-section View of History.— There is what may be termed the *cross-section* or *time view* of history and the *longitudinal* or *subject view.* The first is usually the one used in our school histories, and for an introductory view it is perhaps the better. The story of our country is presented as it happened, as a narration in chronological order. A colony, as Virginia, is taken up and its history traced, naming the events largely in the order in which they occurred. In the Revolutionary War we study the events of 1776, 1777, 1778, etc., each year in succession to the close of the war. When we come to the National Period, we study the events of Washington's administrations, then John Adams's, then Jefferson's, and so on. The principal association here is a time or administration association. The events are grouped by years or administrations. Some teachers have severely criticized such grouping, but it is not wholly bad. No year's study of history ever did me more good than one when my class were required to group the events by administrations, and to be able to name at any time the events during each administration. It may be that time is wasted on learning dates. Some teachers go to extremes on this line, but there is another extreme no less pernicious, and that is in knowing something of an event and being utterly unable to locate it in time or place. A high school pupil completing United States history could tell me reasonably well the story of the Whisky Rebellion, but did not remember when it occurred, whether it was Washington or Cleveland who called out the militia, or whether he sent them to Florida, Pennsylvania, or California. Now a proper understanding of the Whisky Rebellion would include the following points: —

1. When it occurred.
2. Where it occurred.
3. Why it occurred.
4. What was the constitutional authority for the revenue law?
5. What authority had the President to call out the troops?
6. What were the results at the time?
7. What were the later results of Washington's precedent?

The event which is remembered without connection in time or place is apt to be of little value from the standpoint of history.

The Longitudinal View of History.— This is in the later study of history the proper method of study. In this you do not study by cross section, but by subject. The time sequence is not limited to arbitrary periods, as by administrations, but a subject is traced through our history. Cause and effect are made more prominent than time. To illustrate by example, suppose we are investigating the subject of *Slavery in the United States,* a subject rich in its results as a history study and appropriate for the advanced high school class. The outline should stand in the teacher's mind something as follows; then in addition to having reference works and a clear understanding of the subject himself, the teacher should have an earnest desire to give the class a clear view of the subject with all its ramifications into our social, economical, and political life.

1^1 Slavery.

  1^2 Origin of slavery in the world.

- 2^2 Good and bad influences of slavery.
- 3^2 Racial slavery and slavery of the weak.
- 4^2 Why the negro made a good slave.
- 5^2 Slavery in Greece.
  - 1^3 Kind.
  - 2^3 Six bases of Grecian slavery.
  - 3^3 Number of slaves.
  - 4^3 Treatment of the slaves.
- 6^2 Slavery in Rome.
  - 1^3 Kind
  - 2^3 Number of slaves.
  - 3^3 Treatment of the slaves.
  - 4^3 Four ways by which the slaves could become free.
- 7^2 Slavery in other countries of Europe.
- 8^2 Slavery in the United States.
  - 1^3 Introduced in 1619.
    - 1^4 How introduced.
    - 2^4 Spread to every English colony — took firm root in the South and died out in the North because of —
      - 1^5 Climate.
      - 2^5 Industries.
      - 3^5 Character of early colonists.
      - 4^5 Invention of the cotton gin, spinning jenny, and power loom.
    - 3^4 Emancipation in the Northern colonies.
      - 1^5 When.
      - 2^5 How — name for each colony.
  - 2^3 The Negro Plot, 1741.
  - 3^3 Ordinance of 1787.
    - 1^4 When first proposed.

- 2⁴ Origin of this public domain and its influence on making a Union possible.
- 3⁴ By whom prepared.
- 4⁴ Authority.
- 5⁴ Provisions.

4³ Slavery compromises of the Constitution.
  - 1⁴ The Connecticut Compromise.
    - 1⁵ By whom introduced.
    - 2⁵ Give history of it.
  - 2⁴ The Apportionment Compromise.
    - 1⁵ Precedent for.
    - 2⁵ Provisions.
      - 1⁶ For representation and direct taxes.
      - 2⁶ Importation of slaves.
      - 3⁶ Duty on imported slaves.
    - 3⁵ To whom advantageous and why?

5³ The Fugitive Slave Law of 1793.
  - 1⁴ Provisions and penalties.
  - 2⁴ How evaded.
  - 3⁴ Northern merchants did as much or more to sustain slavery as Southern planters.

6³ Invention of the cotton gin, 1793.
  - 1⁴ The inventor.
  - 2⁴ Why needed.
  - 3⁴ Results.
    - 1⁵ On the production of cotton.
    - 2⁵ On the price of land.
    - 3⁵ On the settlement of the Gulf States.

- 4^5 On the demand for Negro slaves.
- 5^5 On building factories.
- 6^5 On cotton as an article of clothing.
- 7^5 On commerce.
- 8^5 On the hope for gradual emancipation.

- 7^3 The exportation of slaves forbidden, 1794.
- 8^3 The foreign slave trade restricted, 1800.
- 9^3 The importation of slaves forbidden, 1807.
- 10^3 Additional measures for restricting importation of slaves.
- 11^3 Slave trade made piracy and punishable by death, 1817.
- 12^3 The Missouri Compromise, 1820-21.
  - 1^4 The question at issue.
  - 2^4 Tallmadge's amendment.
  - 3^4 Clay's opposition.
  - 4^4 Missouri and Maine united in one bill in the Senate.
  - 5^4 The Missouri Compromise proper introduced by Senator Jesse B. Thomas of Illinois.
  - 6^4 The objectionable clause in Missouri's constitution.
  - 7^4 Recommendations of the Committee of Thirty.
  - 8^4 Missouri's pledge.
  - 9^4 Results.
  - 10^4 The views of leading statesmen on the compromise.
- 13^3 Publication of the *Liberator,* 1831.
- 14^3 New England Anti-Slavery Society, 1832.

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- 15^3 American Abolition Society.
- 16^3 Annexation of Texas and the Mexican War, 1845.
  - 1^4 History of Texas previous to annexation.
  - 2^4 Calhoun's influence as Secretary of State on annexation.
  - 3^4 Opinions of Jackson, Van Buren, and Clay on annexation.
  - 4^4 Calhoun's revenge on Van Buren and the nomination of Polk the expansionist.
  - 5^4 Cause of the war.
    - 1^5 Desire for new territory, especially slave territory.
    - 2^5 Texas colonized by Americans who were loyal to the United States and desired annexation.
    - 3^5 Disputed boundary of Texas.
- 17^3 The Wilmot Proviso, 1846.
  - 1^4 David Wilmot.
  - 2^4 Occasion for the proviso.
  - 3^4 Provisions.
  - 4^4 Results.
- 18^3 The Free Soil Party, 1845.
  - 1^4 The platform.
  - 2^4 Candidates.
  - 3^4 Results.
- 19^3 Compromise of 1850.
  - 1^4 Cause of the agitation.
    - 1^5 Calhoun's circular.
    - 2^5 Virginia's resolution.
    - 3^5 Free State recommendation.

  - 4^5 California's Free State Petition.
- 2^4 President Taylor's stand.
- 3^4 Clay's Omnibus Bill.
  - 1^5 How named.
  - 2^5 The five provisions.
  - 3^5 Clay's great speech.
  - 4^5 Webster's seventh of March speech.
  - 5^5 Calhoun's last speech and his four demands of the South.
  - 6^5 Foote's resolution.
    - 1^6 Debate upon it.
    - 2^6 The Committee of Thirteen and their seven recommendations.
  - 7^5 The bills must be passed separately or not at all, and why?
  - 8^5 The Fugitive Slave Law.
    - 1^6 Its provisions.
    - 2^6 Why objectionable.
    - 3^6 Results.
      - 1^7 Personal liberty laws. Give the provisions of these laws in the different States.
      - 2^7 Daring rescues.
      - 3^7 Indignation of the North.

20^3 Publication of "Uncle Tom's Cabin," 1852.
- 1^4 Biography of Mrs. Stowe.
- 2^4 Character of the book.
- 3^4 Enormous sale.
- 4^4 Influence on slavery.

- 21^3 Kansas-Nebraska Bill, 1854.
  - 1^4 Authors.
  - 2^4 Reasons for introducing.
  - 3^4 Four results.
- 22^3 Republican Party organized, 1856.
  - 1^4 Why.
  - 2^4 Source of influence and leaders.
  - 3^4 Platform provisions.
  - 4^4 Candidates.
- 23^3 Dred Scott Decision, 1857.
  - 1^4 Who was Scott?
  - 2^4 Cause of complaint and the question at issue.
  - 3^4 The decision.
    - 1^5 Majority and minority reports.
    - 2^5 Influence on the different sections.
    - 3^5 Character of the judges.
    - 4^5 This decision in time of war became the key to emancipation.
- 24^3 Helper's "Impending Crisis."
  - 1^4 The author.
  - 2^4 His principles and method of treatment.
  - 3^4 Its influence in the campaign of 1860.
- 25^3 Lincoln-Douglas debates, 1858.
  - 1^4 Party positions.
  - 2^4 The challenge and arrangements for debates.
  - 3^4 Contrast between Douglas and Lincoln.
  - 4^4 Douglas's questions and Lincoln's replies.

    - 5^4 Lincoln's questions and Douglas's replies.
    - 6^4 Lincoln's clinching argument against police control of slavery.
    - 7^4 Results, local and national.
- 26^3 John Brown's raid.
    - 1^4 Brown's previous career.
    - 2^4 His plans, how carried out.
    - 3^4 Results, personal and national.
- 27^3 Campaign of 1860.
    - 1^4 Split of the Democratic Party.
    - 2^4 Principles of the four different platforms.
    - 3^4 Election of Lincoln and results.
- 28^3 Beginnings of secession.
    - 1^4 Order of secession.
    - 2^4 How other States were influenced to follow South Carolina.
    - 3^4 Methods of conventions.
    - 4^4 Floyd as Secretary of War.
    - 5^4 Resignation of United States senators.
    - 6^4 Possession of forts and arsenals.
    - 7^4 Buchanan's policy.
    - 8^4 Dix's famous order and firm stand.
    - 9^4 Thousands of people on each side were reluctantly forced to take sides.
- 29^3 Crittenden's compromise.
    - 1^4 Provisions.
    - 2^4 Two other compromises, provisions and history.
- 30^3 Inauguration of Lincoln.
    - 1^4 His quiet but firm stand.
    - 2^4 Summarize his inaugural address.

- 31[3] Civil War measures.
  - 1[4] Final effort for peaceable disunion.
  - 2[4] Military leagues.
  - 3[4] West Virginia.
  - 4[4] Lincoln's diplomacy is shown in his first call for soldiers.
  - 5[4] Contraband of war and confiscation of property.
  - 6[4] Lincoln's attitude toward emancipation as shown —
    - 1[5] In his Greeley letters.
    - 2[5] In reversing Freemont's decision.
  - 7[4] Attitude of Congress toward slavery.
  - 8[4] Emancipation Proclamation. Note carefully what it did and what it did not do.
  - 9[4] The second inauguration.
  - 10[4] The Thirteenth Amendment, 1865.
  - 11[4] The Fourteenth Amendment, 1868.
  - 12[4] The Fifteenth Amendment, 1870.

The outline opens up, should we want to carry it farther, the results of the war — the cost in money, the cost in men. Scarcely a family North or South but lost of its best blood. The enormous cost of the war gave rise to our banking system, and laid the foundation for many of our gigantic business enterprises of the last quarter of a century. Carpet-bag rule in the South, the greatest curse of all, followed, in which millions of funds were squandered and nothing to show for it. The rapid elevation of the negro from slavery to citizenship without any educational qualifications shows to what extremes wise men may go in times of passion and excitement.

The causes of the Civil War, of which slavery was one rooted deep in the past, give us many of the gravest problems of the present. The advance class should catch the spirit of subject study in history, for any subject investigated soon discovers new and deeper relations to the student.

Outlines in the Study of History.— In the preceding pages outlines have been spoken of. It is very important for the class to get a clear outline of the subject, and to hold the main points of the outline in mind. It is well, also, for the pupil to be able to stand and tell what he knows of a topic in clear, definite language. It cultivates self-possession and the power to think on one's feet. He should do this without the aid of leading questions, and it should be told in his own language. If he quotes the language of the book, the teacher must make sure that he understands it thoroughly. Just now comes to mind a quotation from Ridpath's School History, learned years ago. However, our teacher talked to us about its meaning until we understood it. Then the language was worthy to be remembered. Speaking of the results of the French and Indian War, he said: " By this conflict it was decided that the decaying institutions of the Middle Ages should not prevail in America, and that the powerful language, just laws, and priceless liberties of the English race should be planted forever in the vast domain of the New World."

There are many ready-made history outlines on the market. Many of them are good, and are useful to the teacher as a help or guide, but it is a great mistake to adopt one outright. In this, as in everything else, the teacher may *adapt* but not *adopt*. The outline given above on slavery in the United States suits me with a good strong class of high school students, because I worked it out and planned it and have used it twice with such a class. To use it again I should recast it and revise it. If the class is not strong many points would be omitted. If our reference library is not adequate that, too, would modify it. It may be helpful to you as a student, but to be helpful to you as a teacher you must work it over and plan it to suit you. You must assimilate it, make it a part of yourself, and then use it. You cannot use it to any advantage ready-made.

Relation of History and Geography.— Let me make a plea for a combination of history and geography in a measure in advanced classes. There is a close inter-relation in these subjects often overlooked but of great importance. Avoiding the practice of pushing the philosophy of history down before pupils are mature enough to grasp it, there are still some broad principles back of history which, if grasped and understood by the teacher, will give coloring or perhaps it might be said *character,* to all his teaching of history. Some of these are:—

1. That history is a continuity, a continuous stream, the continually growing life of man.

2. That this continually enlarging life of man is conserved or stored up for the use of future generations in man's institutional life — the family, the church, the state, the school, the various business enterprises.

3. That there is a close relation between history and geography, and that all good teaching makes constant reference to and use of geography.

This last principle is especially important.

What agencies determine the course of history? Why does history in one country mature rapidly, while in another it moves very slowly? What causes states and empires and cities to rise, flourish, decay, and fall? The stream of history and civilization is like a river, it follows the path of least resistance. High up in Minnesota the Father of Waters has its source, and from a trifling rivulet easily stepped across it winds its tortuous course three thousand miles to the Gulf of Mexico. Its current constantly augmented by tributaries from the east and the west, grows stronger and stronger and more and more difficult to turn into new channels. Here it leaps as a water-fall, there it whirls in an eddy, and yonder it glides in a glossy sheet. The winding of the stream, the whirlpools, the eddies, and the smooth-gliding, glossy sheet are caused by the rocks and soil, the bluffs and slopes, and obstructions along its banks and bed. Its character is determined by its physical environment.

The stream of history had its rise back in the warm and fertile valleys of the Nile and the Euphrates. It moved around the Mediterranean, shifted across northwestern Europe, crossed the Atlantic, and is marching rapidly toward the Pacific slope. What causes the change in the course of this river of human life and activity? Why did it start westward instead of eastward? Why did it not move directly north or south? The answer here is practically the same as with the Mississippi — physical environment.

1. Mountains, rivers, deserts, slopes, plants, animals, climate, mineral products, — all these and many others have influenced man, determining where he should settle, what his occupation should be, in what direction he should migrate when he sought a new home, and other vital questions of his life.

2. The early homes of civilization were along the

Nile and the Euphrates. The soil was immensely fertile. The labor of one man is estimated to have fed a hundred persons. Here in the warmer parts of the temperate zone fruits grew in abundance and wheat and barley were native products. Man found it easy to get a start in developing material, military, and artistic surroundings.

3. As these two centers of civilization became densely populated from such favored surroundings, civilization moved westward because the Mediterranean invited while the Persian and Arabian deserts and the Himalayan crags frowned upon any effort to move eastward. Thus Phœnicia, Asia Minor, Greece, and powerful Rome became each in turn the center of human activity, and for two thousand years the hub of civilization was on the borders of the Mediterranean.

4. For over a thousand years after the fall of Rome the center of activity was in the rich, fertile valleys of Western Europe. Then Columbus added a New and empty world to the Old. "America is another word for opportunity," says Emerson, and it was not long after its discovery, measured in the age of nations, until with new and improved methods of navigation the seat of civilization was transferred to America.

If we can lead pupils to see these forces back of history, it means much to them. Such principles are pregnant with thought, and concrete examples are readily found. Mountains are barriers and often separate distinct kinds of civilization. Notice how the Himalayas divide the civilization of China from that of India. Note the fruitless attempts to hold France and Spain as one nation because the Pyrenees forbid. Russia has, on the other hand, spread all over Northern Europe and Asia because of a continuous broad, fertile plain. The wisest statesmen of Washington's time doubted the possibility of our country ever reaching successfully beyond the Appalachian Mountains. The railroad, the steamboat, the telegraph, and the telephone have made it possible to unite our great and broad country, varying as it does in soil, climate, and resources; and even *with* these modern methods of annihilating space we must not overlook the fact that ours was practically an empty land to be filled with a people of kindred tastes. Had the Mississippi Valley been the seat of a civilization with different ideas and tastes incompatible with ours, the results might have been different.

We thus see that the surface of a country affects its civilization, and the soil affects it almost as much. Where the soil is rich, the population is apt to be dense, and the leading occupation agriculture. If the soil is poor, unless there be mineral resources, the population will be sparse and often nomadic. When we consider the richness and vastness and diversity of our domain, the future of our country is bright. What we need is skill and will to develop it. We may also predict with much assurance where the denser population will be. Those who are familiar with the geography of the country, even after making due allowance for rich undeveloped mineral resources of the highland section, must see that the Mississippi Valley and the Gulf region must in time become the home of a large portion of the population of the nation.

The rich river valleys of the earth, having been the seat of dense populations, have been also the center of many great military movements. To secure permanently the mouth of a river controls the commerce of the river.

Three times has the possession of the Mississippi been a question of national or international importance. The bone of contention, so far as the colonies were concerned, in the French and Indian War was the possession of the Mississippi or its tributaries. Read the record of events leading to the purchase of Louisiana. Upon our part it was the demand of the people of the Mississippi Valley for an outlet to the Gulf. In the Civil War the opening of the Mississippi was one of the four definite plans of the Union forces.

From the consideration of the influence of the soil upon history and civilization it is but a step to a consideration of mineral products beneath the surface. Gold, silver, iron, lead, coal, and gas have had a powerful influence upon the course of history. The last two centuries have increased the influence of these greatly, perhaps more than all other centuries combined. The discovery of coal and iron in the northwest of England about a century ago has shifted the population to that portion of the island. This has made England one of the greatest manufacturing countries of the world, and in numerous ways has contributed to the social, political, religious, and industrial life of the people. The rich gold and diamond mines of South Africa were the cause of the Boer War. Spain's whole career in America was devoted to securing all the gold she could get. The value of Alaskan gold fields threatened to involve us in serious boundary disputes with Great Britain.

Thus we see that in hundreds of ways the stream of history has been influenced by physical environment, and we as teachers should bind history and geography together by constant reference from one to the other until they become a unit in the child's mind.

A FEW DEVICES.

1. A helpful outline for the study of a battle is as follows:—
    (1) When.
    (2) Where.
    (3) Leaders.
    (4) Incidents.
    (5) Results.

This will include the essential things which should be known about a battle, and unless most of these facts may be found, the battle is apt to be of very little importance.

2. Propose such questions as the following, and allow pupils to discuss them freely, giving reasons for their belief, and later it may be left to the vote of the class:—

(1) Excepting Washington, who was the greatest general in the Revolutionary War?

(2) Who was the greatest general in the war of 1812?

(3) Who was the greatest Union General in the Civil War?

(4) Who was the greatest Confederate general?

(5) Which was the greater invention, the cotton gin or the steamboat? The sewing-machine or the mowing-machine? The telephone or the telegraph?

Numerous questions of this kind may be proposed. Their chief value lies in the argument given in support of their position. Discourage all personal prejudice as far as possible.

3. Arrange a Hall of Fame. Place in it the three greatest English discoverers or explorers, the three greatest French, the three greatest Spanish. Let pupils support their candidate by argument, giving reasons why he is entitled to a place in the Hall of Fame. Extend

to other things, as statesmen, generals, inventors, poets, etc.

4. Let pupils choose sides and debate questions pertaining to history. Avoid partisanship. Classes have debated the tariff question in schools where political parties were close, without offense or hard feeling. No one can claim to be properly educated until he can listen calmly to honest opposition to his opinions, when the opposition is properly expressed.

5. Make a list of historic quotations, as, "Don't give up the ship," "Millions for defense, but not a cent for tribute," "We have met the enemy, and they are ours," "I'll try, sir," and half a hundred more, and have pupils tell when, by whom, and upon what occasion each was said.

6. Write upon the board cardinal dates, such as 1492, 1541, 1565, 1607, 1620, etc., and have pupils tell why important by naming a great event of that year. This is an excellent way to impress important dates on the memory.

7. Study the great American inventions and the lives of the inventors. Trace the results, social, political, and economical, upon the lives of the people. Enumerate the results of the invention of the cotton-gin, the telegraph, the mowing-machine, the improved printing press, etc. Suppose all electrical power should suddenly stop, what would be the result on the world? Suppose railroads were all wiped out of existence, how would it change the life of the people? Suppose all mowing-machines and sewing-machines were suddenly destroyed, what would the results be? Nothing is better to lead to an understanding of the importance of our great

modern inventions than to see how quickly they become inseparably connected with our civilization.

8. Maps are among the most useful devices for teaching history. Pupils should have an outline map for the Colonial period, another for the Revolutionary period, another for the National period, and a special one for the war of 1812, the Mexican War, and the Civil War; and as places and events are named, locate them on the map by number or some similar device. On their war map have them trace each campaign and locate each battle studied. Then supplement this war map by maps of each of the great battles fought, showing the movements of the opposing forces. In no other way can pupils get so correct a view of the movements and fasten in mind the facts which should be known as by tracing them on the map. Who does not understand General Scott's invasion of Mexico far better after having mapped his campaign, and it might be asked who ever understood it properly until he did trace it on the map? These maps may be made artistic as well as interesting and valuable. The pupils should be able at any time to sketch briefly and quickly upon the blackboard or paper any campaign they have studied.

9. Give attention to noted days in history. Upon the anniversary of great events call the attention of the pupils in advance to the coming day, and have them to be prepared upon the event and its significance. It may be used as an opening exercise, or if the whole history period be devoted to that one event and its importance impressed on the mind of the class, it is time well spent.

10. Frequently assign review topics miscellaneously and have a written recitation. Pupils should be trained to write accurately and readily upon the board or on

paper, using any topic previously studied. Review constantly.

11. Teach pupils to summarize the facts learned. After they have studied the different colonies, they should summarize the kinds of colonial governments.

(1) The Royal — governed by a representative of the king.

(2) The Charter — governed under a charter or constitution granted by the king.

(3) Proprietary — governed by the man who owned the land. In the same way after they have studied the French and Indian War, they should make a summary something like the following:—

a. The treaty of Paris.

- (*a*) England received from France Canada, except some small islands near Newfoundland, and all territory east of the Mississippi except the territory of New Orleans.
- (*b*) France ceded to Spain New Orleans and all her possessions west of the Mississippi.
- (*c*) Spain ceded Florida to England in return for Havana.

b. It cost the colonies eleven million dollars and thirty thousand men.

c. It engendered strife between the colonies and the mother country.

d. It bound the colonies together.

e. It trained soldiers for the Revolutionary War.

f. It gave England a vast territory in the New World, which, added to what she already had, proved too great for the short-sighted colonial policy of George III and his thick-headed ministers.

g. During the war England allowed the colonies a freedom in trade which she later tried to restrict, but was resisted by the colonies.

12. Teach pupils to associate events together in time. For example, take the year 1619.

(1) The first House of Burgesses in Virginia.
(2) The importation of women into Virginia.
(3) The introduction of slavery.

13. It is a good test of discrimination to call upon pupils to name —

(1) The most important thing in the lesson.
(2) The least important.
(3) The saddest.
(4) The bravest.
(5) The most treacherous, etc.

14. Lead pupils to see how life is modified by each onward step in civilization. The degree of civilization is indicated by the way the people partake of food. Notice, for illustration, the Indians seated on the ground about one vessel from which all eat promiscuously; the Mexicans with rough boards for tables and course manners; the people of the most civilized countries with convenient and ornamental table-ware, table-cloths, napkins, etc. Then have them note that these are products of civilization, and have them point out others, such as the treatment of prisoners, freedom of thought and action, inventions, etc.

15. Have one pupil describe some historic character or some battle or campaign without naming it, and let the others give the name.

16. In your advanced history class investigate as fully as your library and the ability of your class will

permit, according to the longitudinal view of history described above, such subjects as:—

(1) Our foreign relations.
(2) Our territorial growth.
(3) The tariff.
(4) Banking.
(5) The rise and fall of political parties.
(6) American inventions and the economic change wrought by them.
(7) Railroads and how they have modified life.

These and a dozen others will form interesting subjects for investigation. They may overlap often, but this will do no harm. Go deeply into them, getting pupils to think and investigate.

XXVII. CIVIL GOVERNMENT

In this great free country of ours, no boy or girl should leave school without a practical knowledge of civil government. If the State is justified in its vast expenditure of money to perpetuate itself, it is justified in demanding that the children in its schools be taught the fundamental principles upon which the government rests. No subject creates a keener interest under a live teacher; no subject is more potent with thought-developing topics; no subject is more closely connected with the development of good citizenship in the coming generation; and few subjects are more grossly neglected in many of our schools. Hundreds of pupils are leaving school each year, many of them graduates of our common schools, boys who are soon to be voters, when they cannot quote the preamble of the Constitution of the United States, tell the different methods by which a president may be elected, or how a law may be passed by Congress. These are sad facts, but if you doubt them, propose such questions before a teachers' institute or on a teachers' examination, and note the answers.

Week after week have I heard teachers in institute grind over the period of voyage and discovery, interesting as it may be, and yet I knew full well many had never read the constitution of their own State and some had never studied the Constitution of the United States carefully enough to be acquainted with its main provisions. Often do you see courses of study in which provision is made for a minute study of the history of

Greece and Rome, and sometimes England, when less than a month's time is devoted to the study of civil government, and this only in connection with the general subject of United States history. The subject of civil government is in my judgment so important and yet so neglected in many of our schools that I want to emphasize its study. Take these points home to you:—

1. To neglect this study is unpardonable in American teachers.

2. If you do not interest your class intensely in the subject it is due to lack of enthusiasm on your part or ignorance of the subject.

3. This subject should not be put off until the pupils are able to take up a formal text in the high school, but many information questions of interest and importance may be discussed in the grades.

4. The subject of civil government should then be thoroughly reviewed, together with a thorough study of the Constitution of the United States and the constitution of the State in the advanced grades of the common school or in the high school course.

There is no serious difficulty in the teaching of civil government except lack of enthusiasm and knowledge on the part of the teacher. Pupils are easily interested, parents will become enthusiastic about it, and the only caution needed by the teacher is to use tact on disputed points, and to avoid partisan arguments. The teacher is a poor diplomat who cannot discuss the tariff, free coinage, State rights, our foreign policy, or internal improvements without making strife or ill feeling.

An uncompromising free-silver man taught in an uncompromising gold standard community during the campaign of 1896. Almost every patron knew what his opinions were, and yet he made no enemies nor stirred up opposition. He did not, however, argue politics at the post-office or on the goods box in front of the store. There, as in school, he granted each man his opinion, did not contradict, and did not try to make converts to his opinions. A more serious matter came two years later when he stated to the class in civil government that there was not a man in the county who voted for McKinley. The next day one boy reported, "Pa said that any man who said he didn't vote for McKinley lied." The teacher did not get ruffled, but a few days later, after a careful reading and discussion of the Constitution, they began to study it by subject and outline. Among the topics under "The President" were "Age," "Qualifications," "Term," "How elected," etc. When it came to the manner of electing the president the process was carefully discussed. To the mere Constitutional provision many points of actual practice were added, such as nominating the persons for the electoral college, plan of voting, counting the votes, etc. Some days later, in reviewing the subject, this same boy reported in something of a drawling voice, "Pa says he guesses he didn't vote for McKinley after all. He's been readen my history ever' night for a week or more, an' he says there is a heap of things there he didn't know."

What you want is for your pupils and patrons to think. They may or may not think as you do, but thinking will beget interest in the subject.

The teacher of civil government must read and be interested in what is going on in the world. He must be interested in what Congress and the legislature are doing. This interest will arouse the enthusiasm of pupils. They should read current events — not necessarily the daily papers, but papers which give a clear, unbiased summary of the happenings of the week or the month. There are two troubles with the daily paper in the school-room: It is too bulky, and it is partisan. The daily paper, too, seldom gives enough of both sides of a question for the best use in the school-room. There are, however, many good reviews now, reasonably non-partisan, which may be placed in the hands of a class in civil government. It is well, also, that pupils learn to read the daily papers under the supervision of a teacher, and without taking issue he may teach them to take partisan statements with a grain of allowance.

Pupils should make a careful study of the Constitution of the United States, and the constitution of their own State before leaving school. There are many excellent texts which trace the origin and growth of our government. Such a knowledge is essential to the historian and useful to all, but let me insist that the growth and origin of our Constitution should not overshadow the Constitution itself.

My experience is that it is easy to interest pupils in the workings of the government as it is, but hard to interest many pupils in the origin of the government first. The trouble is, pupils begin to study about the origin of the township and county before they have any conception of the township and county as it is. Early in the school course the pupils should be taught these divisions. They should know the offices, and be able to name the officers and to tell many of their duties. They should learn in the lower grades where one must go to get a deed recorded, to whom they must pay taxes, etc. Then, too, they must know something of the Constitution, how a president is elected, how a bill becomes a law, how a bill is passed over the president's veto, and numerous similar things, before they can be interested in the growth of constitutional liberty in Europe and America. Perhaps, under ideal conditions, in schools of large equipment and libraries, with long terms and well-trained teachers, in communities of wealth, culture, and much reading, it might be that pupils could begin with early civilization, and trace step by step up to our present efficient system of government. Such conditions do not exist in our rural and village schools, and it will be years before they will exist. Our teachers are not yet trained until they can make a success of the "world-view" plan.

A teacher of much prominence told me he never could find what he wanted to in the Constitution because it was so mixed up. Evidently he had not studied it carefully. Take a copy of the Constitution, and note the following general arrangement:—

1. Statement of the purpose — The Preamble.
2. The Legislative Department — Article I.
3. The Executive Department — Article II.
4. The Judicial Department — Article III.
5. The Relations of the States — Article IV.
6. The Methods of Amendment — Article V.
7. The Supremacy of the Constitution — Article VI.
8. The Ratification of the Constitution — Article VII.
9. The Amendments.
    (1) The Bill of Rights — Articles I to X.
    (2) Limiting the Judicial Power — Article XI.
    (3) Election of President and Vice-President — Article XII.

(4) Results of the Civil War — Articles XIII, XIV, XV.

After this general bird's-eye view and a careful reading of the Constitution, the class are ready to study it more minutely by outline. There are many good outlines published, which will be helpful to the teacher. He must, however, adapt them to his school and his class. The pupils should not only keep the outline carefully, but should be able to give the main features of it from memory. It will be time well spent to have the class commit these topics. Then, too, they should be able to quote many passages from the Constitution.

Study your State constitution in school. You can doubtless secure copies for the class from your Secretary of State. There may be slight variations, but in general you will find the following:—

1. Purpose, or Preamble.
2. Legislative Department.
3. Executive Department.
4. Judicial Department.
5. Prohibitions on the State.
6. General Provisions.

Study it thoroughly and make an exhaustive outline of it for your own use and a shorter one for class use. Discuss fully with the class such topics as Right of Suffrage, Constitutional Offices as distinguished from Legislative Offices, Prohibitions on the Legislature, Terms of Office, State Debts and Obligations, Educational Provisions, and numerous others. Such discussions open many opportunities for the teacher to impress upon the pupils the duties of good citizenship. This can be done best by question and illustration without the pupils feeling that they are being lectured. Is voting a duty?

Is it the duty of a good citizen to uphold the law? Should a man inform the proper authorities when he knows a law is being violated?

One thing the teacher should impress, and that is the duty of tax-paying, and that cheerfully. It is not an uncommon thing for many persons to look upon taxes as robbery, and tax collectors as oppressors. Boys soon to be voters sometimes see no reason for paying taxes. Show them that for the protection of life and property as well as for the general welfare taxes are necessary. Suppose a man steals your horse, burns your house, or attacks you in person; to whom must you appeal? The sheriff, the constable, or the police. If you then are given this protection, should you help to pay for it? The live teacher of civil government may make his influence felt for good in the community for years.

A teacher of civil government must not be afraid to ask questions, even though they may be questions which in a sense are unanswerable. They may be questions upon which statesmen themselves would differ, but such questions are found intensely interesting, and a discussion of them in class is a valuable thing. The teacher can readily make out several hundred questions, some bearing directly upon the Constitution itself, and some upon history and political economy in its connection with civil government, and others upon questions of right and wrong of existing conditions, which will create a great deal of interest. Below are given a few questions out of a long list which have been discussed in my civil government class. Many of them were not settled, and are still open for discussion in your classes.

1. Who chooses the United States Representatives?

Must Representatives be residents of the districts they represent?

2. State definitely what qualities a citizen of your own State must have in order to vote for a Representative in Congress.

3. Would it be possible for a person not a citizen of the United States to legally vote for a Congressman? Explain.

4. Could a woman become a member of Congress?

5. Should a Representative move out of a State and become a bona-fide citizen of another State after his election, could he serve the time for which he was elected?

6. Suppose there is a vacancy in a Congressional district and the executive of the State should refuse to issue writs of election, could he be compelled to do so? How? By whom? What would be the result while the matter was pending?

7. Suppose from sickness, accident, or insanity a Senator were permanently disabled to be in Congress, who would have the right to declare a vacancy?

8. A newspaper once declared that New York had three Senators while Ohio had but one. Could such be possible? How?

9. Why is Congress not allowed to name the place for the election of United States Senators?

10. Could Congress meet anywhere but in Washington City? How could this be done?

11. Is a member of Congress a State or a United States officer? Who pays his salary?

12. What is meant by "for any speech or debate in either house they shall not be questioned in any other place"?

13. Suppose a Congressman makes a confession of his guilt in some crime while speaking in Congress, could this be used in convicting him of the crime later?

14. Why are Senators and Representatives forbidden to hold any civil office created or whose salary has been increased during the time for which he has been elected?

15. Suppose the Senator were elected for six years, and during the first two years of his office some position is created by Congress; could this Senator resign and be appointed to that office for the remaining four years?

16. Why is a Senator or a Representative not permitted to serve in Congress and hold an office under the United States government at the same time? Could a member of Congress hold a State office while serving in Congress?

17. What is the only question Congress may decide without submitting it to the president?

18. Could a Canadian be punished for counterfeiting our money? How?

19. Do the residents of the District of Columbia vote? Do they pay taxes?

20. Could a State grant titles of nobility?

21. Could the king of England send the president of the United States a gold watch for a Christmas present? Could an English citizen do so?

22. Upon what conditions could a State begin war without the consent of the United States?

23. Could a State own a war vessel in time of peace? In time of war?

24. Could a postmaster be an elector for president or vice-president? Why?

25. Did you ever see a man who had voted for a president?

26. Could the legislatures of the several States enact laws which would make possible the election of the president without consulting the people?

27. Could Alexander Hamilton have been president of the United States?

28. Could a boy born in China while his parents were missionaries there become president?

29. Some years ago a son was born to our Minister to England while he was residing in London. Would this son be eligible to the presidency?

30. Should the president be confined to his bed several weeks with typhoid fever, would the vice-president act during this time?

31. Could the president be removed from office for inefficiency or poor judgment?

32. Could a United States judge be removed from office for getting drunk?

33. Why is Congress forbidden to lower the salary of a judge?

34. Suppose a crime is committed on a steamboat on the Mississippi River, where would the criminal be tried?

35. What are some of the practical results of the constitutional requirements that "public acts, records, and judicial proceedings shall be given full faith and credit in every other State"?

36. Explain the meaning of the clause, "Citizens of each State shall be entitled to all privileges of citizens in the several States."

37. A State Legislature recently forbade citizens of other States fishing in that State, and permitted cit-

izens of that State to fish. Do you think this a violation of the above clause?

38. Suppose a criminal should take refuge in an adjoining State, and the executive of that State refused to deliver up the accused when called upon by the executive of the State from which he fled, could he be compelled to do so? How?

39. What is necessary to create a new State from the territory of one or more States? Explain the creation of West Virginia.

40. Would Congress have the power to sell one of our Territories, for example, New Mexico?

41. Could Congress sell one of our States? Why?

42. Could the president send troops to a State to supress a riot unless asked to do so by the governor or the legislature of that State?

43. Could the president send troops into a State to protect United States property in times of danger without consulting the executive or legislature of the State?

44. What steps are necessary to amend the Constitution?

45. What one clause of the Constitution could not be changed without the consent of the State or States affected?

46. What one clause of the Constitution declares its supremacy over the State constitutions or laws?

47. Could the United States seize my house or farm for public use? What would be the result? How would it be determined?

48. Show how it would be legal to elect both the president and the vice-president from the same State.

49. Suppose a vice-president should be elected and the president should fail to be elected before the 4th of March. Which vice-president would serve, the old one or the one just elected?

50. How would the vote of a State be determined, as for example New York in the election of a president by the House of Representatives?

51. Suppose a man ineligible on account of age, citizenship, or some other cause, to be elected president, and this ineligibility should not be proved until after he had served a few months. What would be the result? Who would succeed him? Would the acts which he had approved be legal?

XXVIII. PHYSIOLOGY

PHYSIOLOGY is one of the newest subjects to be taught in the public schools. Like scientific temperance, the legislators who made physiology a legal study, were looking to the practical results which would come from the general study of this subject by the young people. Physiology, rightfully taught, has for its object at least three ends: —

1. A practical knowledge of the laws of health and how to develop and care for the body.

2. The general culture value and mental discipline which may come, in a degree, from the study of any subject.

3. In many classes it is nearly the only scientific study taught, and when properly taught it gives the mental discipline, the power of observation, and the training of judgment, which are peculiar to the sciences.

The first object stated above should never be lost sight of by the teacher. Health is a blessing without which all other blessings are in vain. To understand the development and care of the body, to know how to regulate the diet, the exercise, and to know the uplift which comes from personal care and cleanliness,— if these things are accomplished, the teacher has done well. It used to be thought that the body should never be the subject of discussion, and that ignorance of its growth and development was commendable. The growth of population, the crowded cities, and the sanitary conditions made necessary from social and civic conditions, have changed this. A sound mind in a sound body is essential to the highest success in life to the individual. The community cannot neglect or be indifferent to anything that lies so near its very existence.

Then the numerous little things that young people need to know can nowhere else be taught so well. The care of the teeth, the nails, the hair, the eyes, the ears, all of these things are essential. All of them properly belong under physiology, although they may often be grouped under the general term, health lessons.

Great reforms will finally come from the teaching of the laws of health in the elementary schools. It takes one or more generations to discern the fruits of such teaching. Already the average of human life is being lengthened in civilized countries, and a better understanding of nature's laws and a more careful observation of the laws of health will yet add a decade to the average life of man. The effect of stimulants and narcotics, the prevention of disease, the care of the sick, directions for emergencies, what to do in case of accidents, all these subjects properly belong to physiology. The teacher who neglects them neglects his duty. It may be that the text-book does not mention all of these, but the teacher who is alive to his opportunities will not neglect them.

This knowledge may be made a discipline and will lead to culture in the individual. Mind grows by its activity. Useful knowledge is knowledge which will add to the comfort or convenience, to the health or happiness of the individual. This knowledge then will be useful for its own sake.

The value of all scientific study, over and above that which comes from mathematics or language, is due to the observation and the methods by which such knowledge is acquired. It brings, or should bring, the pupil in contact with nature. In the study of physiology the child should never think of physiology as being something away off yonder or in some book. It must be himself. He is the object of study. Physiology thus taught will have much of the disciplinary value common to the natural sciences.

To teach physiology successfully the teacher must have, as in other subjects, a broader and deeper knowledge than will come from having read one elementary author. He must have read more widely and more deeply if he is to be the fountain of inspiration to the class. He must also have seen many of the things first-hand, and must be able to show these same things to his class and be so intensely interested in them that the class will be stimulated by his interest. He must be able to illustrate by drawing, modeling, or by the use of natural objects, many things described. This is really scientific study. Collecting, grouping, accounting for facts and phenomena, is scientific teaching.

The teacher should have clearly in mind the subject he is going to present to the class. He should have clearly in mind also just how he can best illustrate and make these things plain to his class. He must know the text-book he is to teach, and must have studied it thoroughly enough so that he knows the author's point of view. He should have in his mind the author's outline of the subject, and upon these points he must have additional information, and must know where the pupils may find additional information suitable to their own use.

Physiology should begin with well-planned health lessons. These lessons should be oral and adapted to the understanding and conditions of the pupils. These may be subjects of conversation between the teacher and the pupils, even in the primary grades. They should be information lessons largely. The teacher must plan such lessons systematically, however, if the above results are to be obtained.

The lesson may be on the care of the hands, or a number of lessons may be devoted to this topic. The teacher, in a conversational way, may tell the pupils of the different parts of the skin; the purpose of the nails; how the hands should be cared for; what causes the hands to chap; how the nails should be trimmed and cared for; the effect of soap and why, and how to clean the hands; and numerous other such things.

The care of the teeth is another excellent topic. Show even the smaller pupils the different parts of the tooth, and tell how it is composed. Explain why it is necessary to remove the temporary teeth as soon as loose, and why it is injurious to crack nuts with the teeth. Teach them how the teeth should be cared for; why a metal toothpick may be injurious; and many other things which will be of great use to them personally in after life, and in which they will be greatly interested at the time.

Teach also the proper way of caring for the hair. Especially children should be taught how to properly care for the eyes. If such teaching did nothing more than to secure better lighted school-rooms for the next generation, the teachers of the present generation would be well repaid. Correct breathing and carriage, proper exercise, may also form subjects of conversation with even the smallest pupils.

The teacher who is alert will have no trouble in finding a store of information which will please and profit even the older classes. Here, too, the teacher may add much to the interest and profit of the subject if he brings into the study illustrations from the animal world. The teacher, however, in these grades, as well as in higher grades, should discourage experiments of whatever kind that involve cruelty to the lower animals or insects. In the university or medical school, no doubt, the ends justify the means of such experimentation with animals, even the taking of life in dangerous operations, and vivisection may be justified in such advanced work. Many small but interesting and instructive experiments may be performed which will in no way endanger or hurt these animals. Many simple experiments in physics and chemistry will also be of much profit in these grades. A good microscope will be of almost incalculable value to the teacher and of intense interest and delight to the pupils.

In advanced physiology some text-book will, no doubt, be the basis of the work. There are a number of good ones on the market. The teacher must supplement these texts at all times. The first preparation of the teacher should be to get clearly in mind the author's view point in writing the treatise. He is then better prepared to present the subject. He may often present it in a different order from that given by the author, and to good advantage. Scientifically, the bones should be perhaps among the last subjects treated. Practically, they are the easiest taught. If the teacher understands the author's view point, he may take up the subjects in the order which he prefers.

The pupil should be taught to master the text. Many new terms will be met for the first time. The spelling and meaning of those terms should be fastened in mind from the very first. Many of these terms will be self-explanatory if the teacher will see that the pupils understand the root meaning of the word. After the pupils have mastered the text of the author it is well for them to review the subject, following some definite outline which will designate just what points they are to look for. They should be taught to make outlines of the different parts of the body, and so thoroughly master these that they can reproduce them from memory. The outline of the skeleton is easily taught, and also the circulatory system, the respiratory system, the digestive system, the nervous system, and the organs of special sense. All may be taught from outline. When the pupils leave the subject, they should be so familiar with the outline that they can reproduce it from memory. They must carry away numerous facts. There is no good reason or common sense for the fad which has been, to a large extent, prevalent, that the pupils should not be required to commit anything to memory. The only thing is, that it should be intelligently committed. They should understand the thought.

In the advanced grades more experimental work can be done. The bones of animals may be examined. Almost any of the recent physiologies will give numerous simple experiments which the teacher can readily perform. The heart and lungs and the digestive organs of a hog or chicken may be examined. The teaching that does not refer to the objects in teaching such subjects can hardly be called good teaching of physiology. These objects may be handled so daintily as not to disgust the most shrinking or the most fastidious pupil. Teachers should take into consideration the timidity of many pupils, in such experiments. In the study of the eye, obtain the eye of an ox from a butcher and examine it while frozen. In fact, nearly all parts of the body should be illustrated by these parts of the animal.

In the advanced grades, also, the teacher can go more deeply into the laws of health, and the ways by which health may be maintained.

Foods and their comparative worth may be discussed, as well as proper methods of preparation. See, before all things, that the work is sensible and practical. Prepare the pupils for the common emergencies of life by seeing that they know what to do in emergencies and how to do it, as in case of a broken limb, a divided artery, or in scalds, burns, bruises, drowning, or poisoning from any of the common poisons, etc. The teacher will find that the pupils not only delight in such things, but it may be the cause of saving some one's life in the future.

If physiology is properly taught, pupils will be fascinated with the study, and from it will come some of the best lessons of the school course.

XXIX. SCIENTIFIC TEMPERANCE

Within the last few years this subject has been added to the branches required by law to be taught in the public schools of many States. Such laws have been urged and demanded by the Woman's Christian Temperance Union and numerous other religious and reform associations, and many of the laws have been framed by these ardent temperance advocates. Originating in this way, it is to be expected that many extravagant demands will be made upon teachers and schools. Some of the laws demand that a certain per cent. of the volume of the text-book on physiology be devoted to the effects of alcohol and narcotics on the organs of the body. Some demand that scientific temperance shall be taught daily in each grade of the public school — this would imply from the first year of the kindergarten through the university. Some of the demands are ludicrous in the extreme.

These laws are in the main wholesome, and future years will show some good results from painstaking, conscientious, scientific temperance teaching. The purpose of the subject in our school, if we consult the framers of the law, is less to gain a knowledge of the real effects of narcotics and intoxicants upon the organs of the body than to instill habits of temperance or of total abstinence from these things in the lives of the pupils. If the last can be accomplished, or at least partially accomplished, the statutes demanding that scientific temperance be taught in our schools will justify themselves by their results.

One of the greatest errors in teaching scientific temperance comes from exaggerating the evils of intemperance. Boys delight in opposition. They want to show that things often accepted as true are not true, and if a statement seems to them too broad, it drives them to oppose rather than to accept it. Our schools are full of such boys to-day, and if our teaching of temperance appeals to their minds, it must keep within the bounds of reason.

A few years ago I examined a set of temperance charts widely sold in many localities, and at almost fabulous prices, and was astonished at the claims made. It traced all the diseases to which man is heir to the whisky habit. As the agent said, "Just show this to the boys, and it will make them afraid to ever taste the stuff." But there was the mistake. We knew men suffering with some of these same diseases, men who had never more than tasted whisky, and whose fathers and grandfathers had been equally temperate. We knew also men as rugged looking and as strong as the country afforded, who were full of whisky one third of the time, while their fathers and grandfathers had been little or no better; and yet you could find no trace of these diseases. In the face of these facts, had my teacher shown me this chart when I was a boy, and made the extravagant claims about whisky, I should have settled the whole matter in my own mind by pronouncing it "all bosh." Instead of its having made me "afraid of the stuff," I should have been tempted to taste it just to show them that the statements were untrue.

Keep within the bounds of reason. If you want your teaching of temperance to be effective, keep within the bounds of reason and common sense. Teach earnestly, teach by precept and example, but do not overstate your case so much that the thinking, questioning pupils begin to doubt your premises. Teach them that alcohol *may* cause such results, and that it often *does* cause such results; but be willing to grant that the same or similar results and consequences may be caused by other things. Make your case so strong that you give your opponent the benefit of the doubt, and still appeal to his sense of justice, his common sense, and his good judgment. No religious precept or moral principle ever found lodgment in a thinking mind and bore fruit in a quickened conscience and a more active will, unless it first satisfied that mind that this precept or principle was a higher truth than ever before existed in that mind. When the child learns that he has been misled and that the claims made are untrue, the reaction is all the greater.

Teach indirectly. More good may be done often by indirect than by direct teaching in the matter of temperance. To ask the pupil to write five good reasons for *using* tobacco or alcohol, and to write these reasons out in full, may create more thought than any amount of preaching against their use. Let the reader sit down and write out five reasons why a boy should learn to use alcohol, and see if it does not require more thought than to enumerate ten reasons why he should not use it; and in seeking the reasons for its use the conviction forces itself on the mind that its use is an injury and a detriment. The same is true of all fermented and distilled beverages.

There is nothing gained by personal abuse. The temperance reformers of the world who have left their impress and who have sought and saved men, have not been those who indulge in personal abuse. You cannot win a man to you by saying unkind things about him. You must appeal to his intellect and win his sympathy to get his co-operation. You can win boys from tobacco by kindness and firmness a dozen times when abuse would not.

Cigarettes are dragging down more boys in our country than whisky. One of the first symptoms of this habit is that "I don't care" attitude about school and home duties, and the mental sluggishness which accompanies it. In a few weeks' time in arithmetic and algebra the teacher can pick out most of the cigarette fiends. They lack the power of clear, acute reasoning. Nine tenths of them are lazy, and many of them sullen and insolent They care little for school, and less for their father's or mother's words.

Some years ago a teacher suspicioned before the end of the first month of school that one of his high school boys smoked cigarettes. Upon inquiry of his father about the boy's progress, the teacher said the boy was not doing good work, and stated that he had all the symptoms of the cigarette smoker. His father was indignant at the suggestion. He knew his boy did not do such a thing. The teacher watched the boy faithfully for nearly six months before he caught him smoking. He could not swear to the contents of the roll of paper he was smoking, and an affidavit would probably not have convinced the father. It would have done no good to abuse the boy. A number of good frank talks helped him. The teacher pointed out that the cigarettes were affecting his will, or he would not give way to them. It was a battle royal. A little opium-soaked paper enclosing tobacco on one side, a boy with all the qualities for making a worthy man on the other. To continue smoking, to surrender to a little cigarette soldier, meant ignominious defeat in many of the best things of life. Which should be victor, the boy or the cigarette? He and he alone should decide.

Ridicule, if done indirectly, is often helpful. Humor and whole-hearted companionship will accomplish much. Josh Billings has been accredited with the definition of a cigar as "a little roll of tobacco with a fire at one end and a fool at the other." Perhaps he would have defined a cigarette as "a little roll of paper filled with tobacco with a little less fire at one end and a much bigger fool at the other." The teacher who has the personality to say such things, and to carry the majority of his school with him, may create a sentiment among the boys against these habits, and this is worth more than all the scientific facts known to prevent cigarette smoking.

One boy of my acquaintance, not a bad boy — you would have never suspected it by looking at him — smoked the cigar stubbs he found in the street. Like the child who has never learned to question the cleanliness and propriety of spitting on a slate to erase the pencil marks, this boy had never considered that these stubbs were unclean. His teacher took him aside and in a pleasant way spoke of the bad effects of smoking. She did not speak as if she suspicioned him of smoking. She told how smoking depraved some boys until they would even pick up cigar stubbs that others threw away. She then pictured the sore mouths some smokers had, the unclean teeth, the bad breath, the filthy saliva, the foul mucous secretions, and the obnoxious nasal discharges which often find an outlet through the mouth, until the boy never cared to take hold of another stubb with his hand, much less to place it in his mouth. Better still, it proved a new birth to the boy. From that day he was initiated into a higher life, and rose to a higher plane, the plane of personal cleanliness. The old adage, "Cleanliness is next to godliness," has much truth in it. It is unfortunate that many older persons might not, through such a talk or some other means, be helped to such a plane. If they were, there would be cleaner sidewalks, public parks, and street cars.

Suggestive course of study in scientific temperance. Since the passage of the laws in many of the States requiring the teaching of scientific temperance in the schools, there have appeared a number of books upon the subject. Yet many teachers find it hard to unify the work of the course. There is such a demand for help on this that we feel justified in giving an outline of a course of study which will meet the requirements of most of the State laws. It may be found helpful to many teachers. No originality is claimed for this more than in the arrangement. The school may be divided into three sections,— the primary grades, the intermediate grades, and the advanced grades,— and the work in these divisions may be in general as follows: —

The Primary Grades.

1[1] Food.
    1[2] Why we need food.
    2[2] Good kinds of food.
        1[3] Name ten kinds.
        2[3] Simple explanations of why some kinds are better than others.
        3[3] How to eat.
            1[4] Slowly — why?

        - 2^4 Chewing, etc.
        - 3^4 Lessons in table manners.
- 2^1 Drinks.
    - 1^2 Why we need them.
    - 2^2 Show that all plants and animals need to drink.
    - 3^2 Kinds of drinks.
        - 1^3 The best.
        - 2^3 Why tea and coffee are not good for most children.
        - 3^3 How to drink, when to drink, and reasons for the same.
- 3^1 Tobacco.
    - 1^2 What it is.
    - 2^2 Explain why it is not a food.
    - 3^2 Explain why it does not make good blood.
    - 4^2 The poison from the tobacco goes directly into the blood.
    - 5^2 It makes persons very sick until the system becomes used to the poison.
- 4^1 Cigarettes.
    - 1^2 Worse than tobacco because they combine the evil effects of tobacco and other narcotics.
    - 2^2 If the cigarette papers were not soaked in opiates, any other paper would answer as well.
- 5^1 Alcoholic drinks.
    - 1^2 Explain alcohol and alcoholic drinks.
    - 2^2 Name some of the most common.
    - 3^2 What the poison is in alcohol.
    - 4^2 Explain how the system retains this poison.
    - 5^2 Explain alcoholic appetite.
    - 6^2 This appetite grows rapidly until the system must have more and more of the poison. This is especially true of tobacco, alcoholic drinks, opium, chloral, and cocaine.

  - 7^2 Explain fermentation.
    - 1^3 What is wine?
      - 1^4 How made.
      - 2^4 Compare the making of wine and vinegar.
    - 2^3 What is beer?
      - 1^4 How made.
      - 2^4 Compare with wine and vinegar.
  - 8^2 Explain distillation.
    - 1^3 How do distilled and fermented products differ.
- 6^1 Care of the body.
  - 1^2 The bones.
    - 1^3 How bones grow.
    - 2^3 Some causes of weak bones.
    - 3^3 Effect of tight shoes on the bones of the foot.
    - 4^3 How we may improve our form.
    - 5^3 Effects of tobacco on the bones.
    - 6^3 Effects of alcohol on the bones.
  - 2^2 The muscles.
    - 1^3 What the muscles are.
    - 2^3 What the muscles do.
    - 3^3 How we may make the muscles strong.
    - 4^3 How men train for racing and athletic sports.
    - 5^3 Effects of exercise on the muscles.
    - 6^3 Effects of tobacco on the muscles.
    - 7^3 Effects of alcohol on the muscles.
  - 3^2 The skin.
    - 1^3 What it is.
    - 2^3 Its use.
    - 3^3 The layers.

  - 4^3 The purpose of the pores.
  - 5^3 How to keep the skin clean.
  - 6^3 Why bathing is necessary.
  - 7^3 Directions for bathing.
  - 8^3 Care of the hair.
  - 9^3 Care of the nails.
  - 10^3 Care of the teeth.
  - 11^3 What a bad cold is and how to avoid it.
  - 12^3 Effects of tobacco on the skin.
  - 13^3 Effects of alcohol on the skin.
  - 14^3 Effects of other poisons on the skin.
- 4^2 The blood.
  - 1^3 What it is.
  - 2^3 How it is supplied.
  - 3^3 What it does for the body.
  - 4^3 Why it should be pure.
  - 5^3 How we may keep it pure.
  - 6^3 Effects of tobacco on the blood.
  - 7^3 Effects of beer and alcohol on the blood.
  - 8^3 Why alcohol causes a flushed face.
  - 9^3 Why alcohol is not a benefit in cold weather.
- 5^2 Breathing.
  - 1^3 How to breathe properly.
  - 2^3 Effect of tight clothing on breathing.
  - 3^3 Importance of pure air.
  - 4^3 Why close rooms are unhealthy.
  - 5^3 Why we should breathe through the nose.
  - 6^3 Effect of tobacco on the lungs.
  - 7^3 Effect of alcohol on the lungs.
- 6^2 The brain and the nerves.
  - 1^3 Purpose of these organs.
  - 2^3 How protected.

    - 3^3 Effects of impure blood upon them.
    - 4^3 The worrying habit and how to avoid it.
    - 5^3 Pure air and sunshine.
    - 6^3 Effects of tobacco on the brain and nerves.
    - 7^3 Effects of alcohol on the brain and nerves.
    - 8^3 Importance of sleep.
  - 7^2 Direction for care of the eyes.
- 7^1 Discuss in a plain simple way such subjects as these with the pupils:—
  - 1^2 How food is changed in the body.
  - 2^2 How and why we should chew our food.
  - 3^2 Why we should not use strong tea and coffee.
  - 4^2 Why spices and candies are not good for us.
  - 5^2 Why ice water is not best for us.
  - 6^2 Why do men use tobacco?
  - 7^2 Effects of tobacco and alcohol on the mind.

Intermediate Grades.

- 1^1 General character of alcohol.
  - 1^2 Definition and history.
  - 2^2 Fermentation — Illustrate.
  - 3^2 Physical properties of alcohol.
  - 4^2 Distillation — Illustrate.
  - 5^2 Spirituous liquors.
  - 6^2 Classification of liquors.
- 2^1 Chemical composition of alcohol.
- 3^1 Use of alcohol.
  - 1^2 In the arts.
  - 2^2 In the preparation of drugs.
  - 3^2 As a beverage.
- 4^1 Action of alcohol on living animal tissue.
  - 1^2 Alcohol as a drink.
  - 2^2 Alcohol as a food.
  - 3^2 Alcohol as a heat producer.

4^2 Effects on circulation.
5^2 Effects on the blood.
6^2 Effects on the nerves.
7^2 Stages in alcoholic effects.
8^2 Make a summary of the action of alcohol on the tissues.
5^1 Action of alcohol on the mind.
1^2 The inter-relation of the nervous system and the mind.
2^2 The faculties of the mind are all affected.
1^3 Perception is faulty.
2^3 Cannot think clearly.
3^3 Memory is less clear.
4^3 The imagination is unrestrained.
5^3 The reasoning powers enfeebled.
6^3 The finer sensibilities blunted.
7^3 Dulls the respect for self and others.
3^2 Action of alcohol on the will.
4^2 The cumulative habit.
5^2 Make a summary of the effects of alcohol on the mind.
6^1 The hereditary effects of alcohol.
1^2 Dangers of transmitting alcoholic tendencies to future generations.
2^2 Objections to a moderate use of alcohol. Name five.
7^1 Alcohol in its relation to crime.
1^2 A right action involves —
1^3 A knowledge of what is right.
2^3 A feeling of obligation to perform.
3^3 An exercise of the will in choosing and doing.
2^2 All criminal actions lack one of these elements.

    - 1^3 The person either does not know what is right, or
    - 2^3 He is lacking in his sense of duty in what he knows is right, or
    - 3^3 He fails in self-control.
  - 3^2 These are the negative elements of crime. The positive elements are:—
    - 1^3 A knowledge that the act is wrong.
    - 2^3 A desire to commit evil.
    - 3^3 Willing to commit the crime.
  - 4^2 From these elements of criminal actions and the effects of alcohol on the mind it is easy to trace a direct relation between alcohol and crime.
- 8^1 Other stimulants and narcotics with their influence on body and mind.
  - 1^2 Tea.
  - 2^2 Coffee.
  - 3^2 Tobacco.
  - 4^2 Opium.
  - 5^2 Chloral.

Advanced Grades.

- 1^1 Alcoholic drinks.
  - 1^2 Definition.
  - 2^2 Formation.
    - 1^3 By fermentation — Illustrate process.
      - 1^4 Beer.
      - 2^4 Wine.
      - 3^4 Cider.
    - 2^3 Distillation — Illustrate process.
      - 1^4 Whisky.
      - 2^4 Brandy.
      - 3^4 Rum.

        - 4^4 Gin.
        - 5^4 Alcohol.
- 3^2 Composition.
    - 1^3 Alcohol, the important ingredient of each of the above is composed of carbon, hydrogen, and oxygen.
    - 2^3 Carbonic acids.
    - 3^3 Ethers, waters, etc.
- 4^2 Properties.
    - 1^3 Volatile.
    - 2^3 Inflammable.
    - 3^3 The products of alcoholic combustion are carbonic acid and water.
    - 4^3 Great affinity for water.
- 5^2 Amount of alcohol in different beverages.
    - 1^3 Alcohol — 90 to 98 per cent.
    - 2^3 Whisky — 45 to 58 per cent.
    - 3^3 Brandy — 42 to 51 per cent.
    - 4^3 Rum, about 49 per cent.
    - 5^3 Gin, about 42 per cent.
    - 6^3 Wines, 15 to 23 per cent.
- 6^2 General effects on the system.
    - 1^3 The circulation at first is abnormally increased and is later correspondingly decreased.
    - 2^3 The red blood corpuscles are contracted and their power to carry oxygen lessened.
    - 3^3 Congestion and apoplexy often result.
    - 4^3 Produces fatty degeneration.
        - 1^4 Explain.
        - 2^4 Organs thus affected.
            - 1^5 Heart.

2^5 Liver.
3^5 Kidneys.
4^5 Nerves.
5^3 Effect on brain. Review intermediate work.
1^4 Diminishes mental power.
2^4 Causes delirium tremens.
3^4 Sometimes causes insanity.
6^3 Its great affinity for water causes alcohol to absorb this liquid from the tissues.
7^3 It is not a food and enters the blood unassimilated.
8^3 Moral effects. Review intermediate work.
1^4 Creates an appetite for strong drink.
2^4 Leads to immoral associations.
3^4 Causes poverty, drunkenness, and crime.

Some Review Outlines.

1^1 Alcohol.
1^2 Properties.
1^3 Colorless.
2^3 Pungent taste.
3^3 Peculiar and pleasing odor.
4^3 Inflammable and does not smoke when burning.
5^3 Will not freeze.
6^3 Absorbs water and oxygen.
7^3 Mixes readily with oils.
2^2 Uses.
1^3 Used by jewelers and others for blow-pipe flame for welding.
2^3 Dissolves gums.
3^3 Used to mix with oils.

  - 4^3 Used in spirit levels and in thermometers.
  - 5^3 Used for preserving numerous kinds of organic matter in museums and laboratories.
- 3^2 Effects on the body.
  - 1^3 How shown.
    - 1^4 By experimental investigation.
    - 2^4 By observation.
  - 2^3 Effects on digestion.
    - 1^4 Direct.
      - 1^5 Increases flow of gastric juice.
      - 2^5 Coagulates albumin.
      - 3^5 Precipitates pepsin.
      - 4^5 Inflames mucous membrane.
      - 5^5 Hinders digestion.
    - 2^4 Indirect.
      - 1^5 Affects nervous system and this reacts upon digestion.
      - 2^5 May cause thickening of walls of the stomach.
  - 3^3 Effects on temperature of the body.
    - 1^4 Paralyzes nerves controlling capillaries; hence the blood flows to the surface and gives a feeling of warmth to the body.
    - 2^4 This will cause the person to freeze more quickly, as more blood is on the surface.
    - 3^4 Absorbs oxygen and thus reduces the temperature.
  - 4^3 Effects on moisture of tissues — it absorbs water and creates thirst.

- 5^3 Effects on circulation and on the blood.
  - 1^4 Increases the heart beats.
  - 2^4 Long continued use causes irregular heart beats.
  - 3^4 Often causes fatty degeneration of the heart.
  - 4^4 Coagulates fibrin in the blood-vessels.
  - 5^4 Dissolves coloring matter of corpuscles.
  - 6^4 Causes shrinking of red corpuscles.
  - 7^4 May cause deposit of earthy matter in the walls of the blood-vessels, hardening them.
- 6^3 Effects on nerve tissue.
  - 1^4 Excites nerve centers.
  - 2^4 Affects spinal cord.
  - 3^4 Hardens tissue of brain.
  - 4^4 Thickens membranes of brain.
  - 5^4 Nerves sometimes paralyzed.
  - 6^4 Results.
    - 1^5 Inability to control movements.
    - 2^5 Diseases of the nervous system.
    - 3^5 Loss of mental power.
    - 4^5 Leads to imbecility.
    - 5^5 Paralysis and death may result.
- 7^3 Effects on the liver.
  - 1^4 Congestion.
  - 2^4 Enlarged or shriveled.
  - 3^4 May produce the hob-nailed liver.
  - 4^4 Unfits the liver to do its work.
- 8^3 Effects upon respiration.
  - 1^4 Irritates the membranes of the lung cells.

    - 2^4 Causes congestion.
    - 3^4 Prevents the proper oxygenation of the blood.
  - 9^3 Effects on the eyes.
    - 1^4 Inflames the membranes.
    - 2^4 May cause structural changes.
    - 3^4 Affects the optic nerve.
    - 4^4 May result in loss of sight.
- 2^2 Summary.
  - 1^3 Alcohol is
    - 1^4 A product of decomposition.
    - 2^4 A poison.
    - 3^4 A narcotic.
    - 4^4 An irritant.
  - 2^3 Alcohol causes —
    - 1^4 Disease.
    - 2^4 Crime.
    - 3^4 Insanity.
    - 4^4 Death.
  - 3^3 Alcohol frequently does the following:—
    - 1^4 Injures the blood.
    - 2^4 Wastes the vital force.
    - 3^4 Lessens the temperature of the body.
    - 4^4 Hardens the tissue of the brain.
    - 5^4 Affects the liver.
    - 6^4 Draws moisture from the tissues.
  - 4^3 Alcohol may cause —
    - 1^4 Apoplexy.
    - 2^4 Heart disease.
    - 3^4 Paralysis.
    - 4^4 Congestion of many of the organs.
    - 5^4 Dyspepsia.
    - 6^4 Cancers and ulcers.

5^3 Alcohol is not a proper —
1^4 Food.
2^4 Drink.
3^4 Seldom a proper medicine.
2^1 Effects of tobacco.
1^2 It inflames the mucous lining.
2^2 It irritates the stomach.
3^2 It injures the blood corpuscles.
4^2 It disturbs the heart's action.
5^2 It affects the sight and hearing.
6^2 It weakens the nervous system.
7^2 It checks bodily and mental development in young persons.
8^2 It tends toward the drug habit.
9^2 It is expensive.
10^2 It is a filthy habit.

NOTES AND EXPERIMENTS.

Fermentation.— Alcohol is derived from the decomposition of sugar by fermentation. This is a chemical change. Sugar is a vegetable product. Starch undergoes a change so that sugar may be produced from it. Sugar and starch may be viewed together as the source of alcohol. Fermentation is that well-known process of souring. This is caused by the growth of the ferment, a minute organism, which feeds on the sugar. The small organisms are found floating in the air. They quickly attack fruit juice, especially if the temperature is right, and multiply rapidly, changing the sugar into carbonic acid gas and alcohol. The gas may be seen forming little bubbles, which is usually our first intimation that the substance is souring. Cider, beer, and wine are the most common fermented drinks, and contain only limited quantities of alcohol.

Distillation.— Distillation is the separation of two fluids which boil at different temperatures. Alcohol boils at 173° F., and water at 212° F. Hence if a liquid containing alcohol be heated above 173° F., the alcohol will escape as vapor. This vapor may be condensed, forming alcohol. By re-distillation the alcohol may be obtained more nearly pure. Pure alcohol is a deadly poison.

1. Pour a little alcohol in a saucer, touch a lighted match to it and note the flame, the heat, etc.

2. Fill a teapot with hard cider, place it over a lamp, and raise it to 173° F. Connect the spout with a bottle by a rubber tube. Set the bottle on ice or in cold water. The alcohol will escape as vapor and be condensed in the bottle. Re-distil, and it will be found to burn, giving off much heat but an almost invisible flame.

3. Secure a fresh brain from some small animal. Notice how soft and tender it is. Place it in a solution of alcohol, and notice how soon it becomes hard. The alcohol cooks it and absorbs the moisture from it.

4. From the stomach of a calf or a pig secure a few drops of the gastric juice. Into this milky fluid pour a few drops of alcohol, and see how soon there will be a white, powdery precipitate. This is the pepsin of the fluid, and without this digestion cannot be perfect.

5. Place some soil in each of two bottles, and then plant seeds in each. Into one bottle pour water only, into the other pour water mixed with a little alcohol. The alcohol prevents the growth of the seeds.

6. Run a broom straw through the stem of a well-used pipe, obtaining some of the dark substance, principally nicotine. Place this on the tongue of a cat. It is a deadly poison.

XXX. NATURE STUDY

Much has been written of late on nature study. The markets have been flooded with books on this subject, many of them helpful and suggestive to the teacher. Then, too, there have been many volumes for the pupils. The latter are useful enough if they arouse the pupil's curiosity and interest, and send him to nature for the answer. If, however, they are intended to take the place of nature, they are little better than the fairy story.

Nature study serves three purposes: —

1. It teaches observation. Too many children, as well as adults, having eyes, see not, and having ears, hear not the beauties and wonders of nature all about them. The first object of nature study is the cultivation of keen observation in the child. He should be quick to appreciate the beauties and anxious to investigate the wonders of plant and animal life, and open to the inspiring uplift of scene or sound. Too many pupils, and teachers, too, have never seen a feather — that is, they have never even noticed that the common feather is composed of numerous smaller feathers, each with a small quill sticking into the larger quill. Thousands of boys have plowed corn week after week without noticing the exquisite beauty of the delicate flower on the corn tassel. Too many of our boys and girls are growing to manhood and womanhood with no power to appreciate the sunset's glow, the dewdrop's diamonds, or the storm cloud's flashing eye and thunderous voice. They cannot see or appreciate the landscape scene with its gorgeous tints, or enjoy the restful quiet of the forest trees.

Standing in a high school building in a cluster of native oaks in the foothills of the Ozarks, an inspiring landscape with forest and field and crystal stream, and over all the balmy blue of a bright June day, I was surprised to find that few teachers out of a hundred had ever noticed the beauty about them, while a fourth of them had been educated in the selfsame building. And to think, too, that they were to be the source of inspiration, the ones above all others who were to interpret the beauties of nature to the minds and souls of some thousands of children in that county the coming year. If nature study did nothing else than to open the child's mind to the beauty of nature about him, it would be enough to justify it in the school course.

2. *Nature study does not cultivate observation only, but the other powers of mind as well.* If properly taught, no subject cultivates inductive reasoning more effectively. The child is trained to observe the facts and phenomena, and from these to reach the reason and laws. Nature study should pave the way for natural science study later, and the inductive study of the sciences is admitted one of the best of disciplinary studies.

3. *The facts of nature study are among the most useful knowledge to pupils in after life.* The knowledge of plant and animal life learned by children in a well-planned nature study course are sources of pleasure and profit. Aside from the interest in the study, their minds will be stored with useful knowledge. Nature study may cover much of what is included in agriculture. In addition to learning the names and uses of plants, children

may be taught much of the proper cultivation of plants. The farmer boy will be interested in why and how plowing corn makes it grow. He will understand the reason why his father wants him to plow close to the little corn, and to get farther away at each succeeding plowing. He will understand why a single stalk of corn standing alone seldom makes a perfect seed ear; why different kinds of corn mix, etc. He will see why potatoes and similar plants must be laid by early, and learn numerous other facts of a practical nature.

Among the most glaring defects of nature study may be named the following: —

1. The teacher teaches books instead of nature. The children read about plants and animals instead of studying plants and animals. If nature study is to be from books and books alone, it is better that other studies take its place. The great value of the subject comes from bringing the pupils into direct contact with nature. Lessons on the cotton plant to the children of Minnesota may be all right as an information lesson, but it is poor nature study. A lesson on the Greenland whale may interest the Mississippi child, but it cannot be properly called nature study.

2. The lessons in nature study are dry and formal. The teacher holds to some set form for fear the pupil will ask some question, or become interested in something not in the lesson. The lesson plan is reduced to a skeleton, and the pupils are in a formal way trying to fill in a few blanks with a little meat. The skeleton outline is all right as a guide, but it must be made a living thing to the pupils.

3. There is no system in teaching the subject. Just the opposite of the teacher that has every lesson cut and dried and knows beforehand just how each pupil must fill in each blank to be acceptable, is the teacher who makes no systematic preparation for the work. He takes up without any planning any lesson that suggests itself. He goes off on any tangent suggested by an irrelevant question. He scatters everywhere and gets nowhere. He talks about this thing to-day, that one to-morrow, and something else next week, without leaving anything definite in either case. He does not study or plan what to present, or how to present it, but trusts to the inspiration of the moment.

4. Nature study is not adapted to the place or season. December would not be a good month for the study of the housefly, nor would June be a good month for the study of the snowflake. The pine tree would not be a good tree for study in Illinois, nor the beech in Louisiana, because they are not common enough.

In right nature study the teacher selects the objects for study carefully. These will be suited to the time and place. He studies these not only at first hand, but seeks all the information possible from other sources. He is not only full of his subject, but he has the information well organized. He is full of interest and inspiration also to the class. He secures their interest and incites to careful observation. He is ready to seek information with the class, and is alive to anything new.

Note-books are kept, in which the pupils make a record of their observations. These records are made informally. Pupils are encouraged to make observations at home and report them to the class. These suggestions may be formulated into lessons in the class, and the habit of careful observation and note taking developed.

In most lessons there should be specimens enough for each member of the class, and a few to replace any specimen spoiled during the work. In some cases a few specimens placed where each can examine them will suffice.

In the lower grades, teach children to observe closely flowers and animals. It is strange how many pupils, though raised in the country, cannot tell how many toes a cat, a dog, or a cow has. Larger pupils are often not sure whether a cow's horns are in front or behind her ears. Many farmer boys cannot tell how the common animals get up or lie down.

Insects, too, are a source of ever renewed interest to the person who observes them. Notice the common house fly, how he eats and how cleanly he is. Dust some flour on him, and see him clean his body. Notice him under a magnifying glass, and the lower part of each leg is a brush. Interest children in the study of all kinds of common insects. How the cricket and the katydid sing will interest them.

Nothing in nature has the power to interest small children so quickly or so intensely as the activities of animals — the birds as they fly and sing, fishes as they swim, and animals as they move about. Plants and flowers, however, have some advantages over animals, as they can be studied in all their stages of development. They are also more easily obtained and cared for. Children are easily interested in growing seeds and unfolding flowers if they have a part ownership in them. This is a quick way to cultivate a sympathetic interest in nature. The feeling of ownership and individual rights is a wonderful stimulus to children.

In addition to the study of plants and animals, water, air, and sunlight, with their effect upon life, may be daily observed and should receive special attention.

The teacher alive to the importance of nature study will overcome all opposition from patrons. He may have to educate public sentiment in favor of certain lines of work, but he will do it successfully. Nature study may be new in the school, and parents and others may not appreciate it, but the teacher who really interests the pupils and gives them something worth while, will soon have the hearty support of all. In farming communities he may give more attention to farm products — corn, vegetables, fruits, etc. In manufacturing towns he may emphasize manufactured articles, as flour, paper, iron, or woolen goods. These things will meet with the approval of many people who would criticize the study of birds and insects. The tactful teacher who understands how to teach and who appreciates the value of nature study, will not ignore so powerful a force as the parent's approval. He will carefully consider in the beginning what things will be most likely to meet with favor or disfavor in his locality.

A living, growing interest on the teacher's part will beget enthusiasm on the pupils' part. When parents realize that the children are interested, and that in addition to their nature work they are doing better in reading, writing, spelling, geography, and other subjects, because of their interest in this, the teacher will be permitted to exercise his judgment in the selection of material. His motives will not be questioned, even if a few entertain a notion that it is all a fad.

Continue the nature study, then, through the grades, selecting types which can be studied in their own natural environment. Your work, if properly done, should, in addition to its intellectual culture, develop the child's higher nature, spiritual, æsthetic, and ethical; increase his happiness by making him better acquainted with his physical environment; prepare him better to appreciate the beautiful literature which nature has inspired; increase his love, sympathy, and interest in all living things; and lift him to higher love of nature and nature's Author.

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